

Final decision

Murraylink transmission determination
1 July 2023 to 30 June 2028

Overview

April 2023

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Note

This Overview forms part of the AER's final decision on Murraylink's 2023–28 transmission determination. 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 – Maximum allowed revenue

Attachment 2 – Regulatory asset base

Attachment 3 – Rate of return

Attachment 4 – Regulatory depreciation

Attachment 5 – Capital expenditure [CONFIDENTIAL]

Attachment 7 – Corporate income tax

Executive summary

The Australian Energy Regulator (AER) exists to ensure energy consumers are better off, now and in the future. Consumers are at the heart of our work, and we focus on ensuring a secure, reliable, and affordable energy future for Australia. The regulatory framework governing electricity transmission and distribution networks is the National Electricity Law and Rules (NEL and NER). Our work is guided by the National Electricity Objective (NEO).

A regulated network business must periodically apply to us to determine the maximum allowed revenue it can recover from consumers for using its network. On 31 January 2022 we received a proposal from electricity transmission interconnector Murraylink, for the period 1 July 2023 to 30 June 2028 (2023–28 period). We have consulted on that initial proposal, a draft decision in September 2022, and a revised proposal submitted by Murraylink in response to that draft decision in December 2022. Our final decision is that Murraylink can recover \$90.9 million (\$nominal, smoothed) from consumers over the 2023-28 period. This is \$1.4 million (1.6%) more than Murraylink’s revised proposal.

Our final decision largely accepts Murraylink’s revised proposal, including its total forecast operating expenditure (opex). Our review has identified other areas, including forecast capital expenditure (capex), in which Murraylink has not satisfied us that its forecasts and calculations are appropriate, and our final decision therefore includes a lower amount. The impact of these reductions is offset by movements in market variables such as interest rates, bond rates and expected inflation. These are currently acting to increase regulatory depreciation of Murraylink’s regulatory asset base (RAB) relative to its revised proposal. Updates for these movements are a standard part of our determination process. Their impact in this final decision is that total revenue is higher than presented in Murraylink’s revised proposal.

At the time of our draft decision, the only outstanding issue was Murraylink’s proposed solution to the replacement of obsolete Insulated Gate Bipolar Transistors (IGBTs). No expenditure for this was included in its initial proposal or our draft decision. Our expectation was that Murraylink would engage further with consumers in order to address it in its revised proposal. The outcome of that engagement was that capex would not clearly be needed in the 2023-28 period, and that the investment contemplated would not satisfy the NER criteria for contingent projects. Murraylink therefore did not propose, and our final decision does not include, any such expenditure.

Our draft decision accepted Murraylink’s initial opex proposal. Murraylink’s revised proposal introduced new opex for insurance and to meet Security of Critical Infrastructure (SoCI) obligations that was not contemplated in its initial proposal or our draft decision. Insufficient supporting information was provided to demonstrate the prudence or efficiency of that new expenditure. However, because Murraylink maintained its simplistic version of our preferred, base-step-trend opex forecasting methodology, the addition of this new expenditure still produces a total opex proposal that is not materially different to (and remains slightly lower than) our own alternative estimate. Our final decision therefore accepts the total forecast opex in the revised proposal.

Our draft decision accepted Murraylink’s initial, total capex forecast because. We did not agree with Murraylink that regulatory reset costs should be included in its capex forecast but removing those costs alone would not have resulted in a materially different total capex outcome. Murraylink’s revised proposal again included regulatory reset costs in its capex forecast, and also added new capex to meet SoCI obligations. The new SoCI expenditure, which was not contemplated in its initial proposal or our draft decision, was for APA Group capex programs we have already considered and rejected in our final decision on the APA VTS access arrangement last December. It relied on similar supporting analysis. Absent new information or argument, we have again rejected it here. This creates a material difference between Murraylink’s revised proposal and our alternative estimate of prudent and efficient capex. Our final decision therefore approves total forecast capex which excludes both the new capex in the revised proposal and the regulatory reset costs we said in our draft decision should not form part of the capex forecast.

The impact of these capex reductions is offset by movements in market variables such as interest rates and expected inflation. Our final rate of return is lower than Murraylink’s revised proposal due to movements in market rates and this reduces total revenue. However, expected inflation in this final decision is increasing regulatory depreciation which in turn increases revenue and offsets the decreases due to lower capex and rate of return. Updates for these movements are a standard part of our determination process and these are not areas of disagreement between us and Murraylink. As in our draft decision, the increase in regulatory depreciation outweighs the combined effect of the reductions to Murraylink’s capex forecast and return on capital, resulting in higher total revenue than its revised proposal.

1 Our final decision

In the sections below we briefly outline what is driving Murraylink’s revenue, and the key differences between our final decision revenue of \$90.9 million (\$nominal, smoothed) compared to the \$87.4 million in our draft decision, and the \$89.5 million in its revised proposal.

In our draft decision we explained why we had determined a revenue allowance that was significantly (15.4%) higher than Murraylink initially put to us in January 2022. Having carefully reviewed Murraylink’s proposal, our draft decision accepted the core parts of its proposal in respect of capex and opex. However, after Murraylink lodged its initial proposal, we saw movements in market variables such as interest rates, bond rates and expected inflation which acted to increase the return on Murraylink’s regulatory asset base relative to its January proposal.

It is important that we update for the latest market data so that Murraylink’s determination reflects current financial market conditions. This enables Murraylink to attract the capital it needs to provide the services that consumers want. Moreover, the return investors receive on their assets should reflect the risks of their investment. These risks include the prospect of inflation eroding the investor’s purchasing power. An allowance for expected inflation provides compensation for this risk.

The rate of return and expected inflation parameters have decreased from our draft decision and Murraylink’s revised proposal:

- Our final decision applies a rate of return of 5.46% for the first year of the regulatory period based on the new, 2022 Rate of Return Instrument and final data from Murraylink’s approved averaging periods. This has decreased relative to the placeholder rates of return used in the revised proposal (5.70%) and our draft decision (5.56%).
- Our final decision uses an inflation estimate of 2.92% based on the Reserve Bank of Australia’s February 2023 Statement of Monetary Policy, compared to Murraylink’s revised proposal which used an inflation estimate of 3.50%.

This means the return on capital in this final decision is lower due to the decrease in the rate of return. However, the decrease to expected inflation results in higher regulatory depreciation which more than offsets the lower return on capital. This higher revenue is also compounded by a higher revenue adjustment building block due to a lower CESS penalty in our final decision and a higher corporate income tax amount. The combined impact on the final decision is that total smoothed revenue is \$1.4 million (1.6%) higher than presented in Murraylink’s revised proposal.

Murraylink recovers its regulated revenue through transmission charges, which will be set annually in accordance with the pricing methodology we have approved as part of this final decision.¹ These are recovered through ElectraNet’s transmission charges in South

¹ [Murraylink - Attachment 02 - Pricing methodology - 31 January 2022](#). Our draft decision also accepted Murraylink’s proposed pricing methodology: [AER - Murraylink 2023-28 - Draft Decision - Attachment 11 - Pricing methodology - September 2022](#)

Australia, and AEMO's transmission charges in Victoria. Charges are allocated according to the value of Murraylink's assets in each State and we estimate these contribute less than 2% to those charges.

Our decision on Murraylink's proposal sets the revenue allowance that forms the major component of its transmission charges for the 5-year period. It provides a baseline or starting point for those five years. Over the 2023–28 period there are several additional mechanisms under the NER that may operate to increase or decrease those charges. These may include projects defined by the Australian Energy Market Operator (AEMO) as necessary to its Integrated System Plan (ISP), and cost pass through events defined in the NER.²

Should Murraylink provide negotiated services during the 2023–28 period, the terms and conditions of those services are governed separately by a negotiating framework³ and negotiated transmission services criteria⁴, both of which have also been approved as part of this final decision.

1.1 What is driving revenue?

Over time, inflation impacts the spending power of money. To compare revenue from one period to the next on a like-for-like basis, in this section we use 'real' values based on a common year (2022–23) that have been adjusted for the impact of inflation instead of the nominal values above.

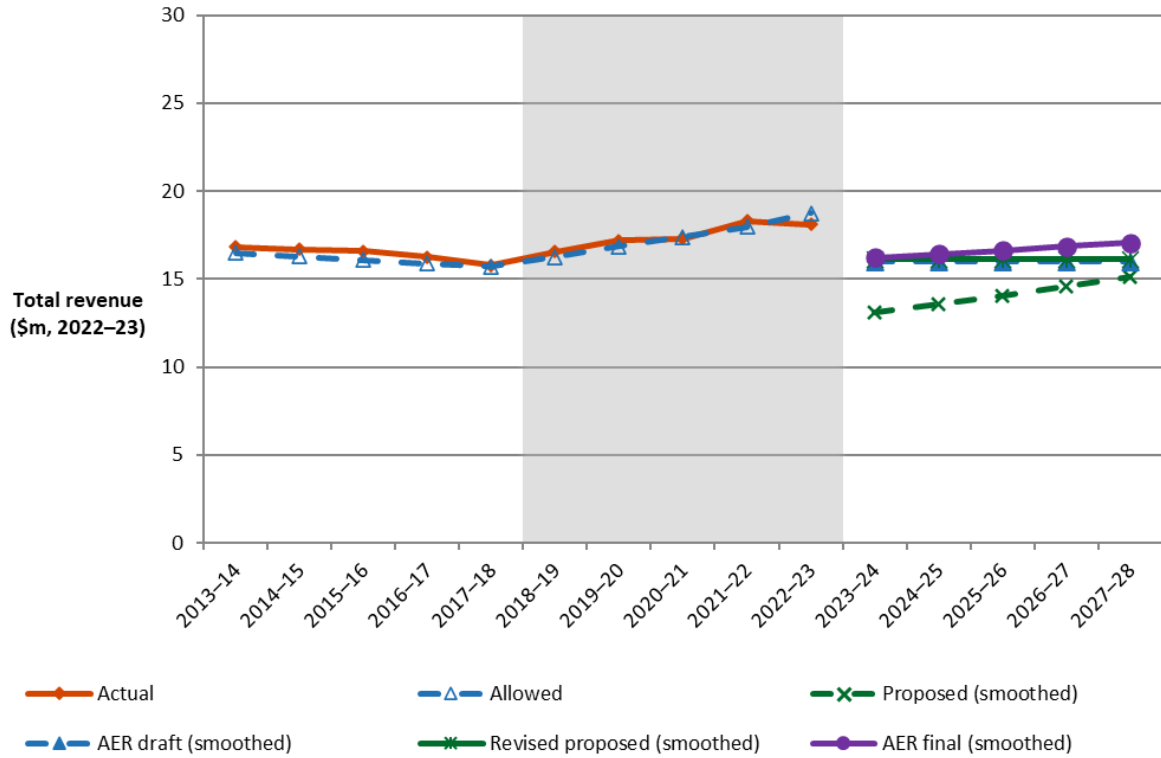
In real terms, this final decision would allow Murraylink to recover \$83.4 million (\$2022–23, unsmoothed) from consumers over the 2023–28 period. This is 4.5% lower than our decision for the 2018–23 period. Changes in Murraylink's revenue over time are shown in Figure 1.

² Murraylink could have, but chose not to, propose additional nominated cost pass through events to apply as part of its transmission determination. Consistent with our draft decision, our final decision is that no additional pass through events will apply to Murraylink for the 2023–28 regulatory control period.

³ [Murraylink - Attachment 01 - Negotiating framework - 31 January 2022](#). Our draft decision also accepted Murraylink's proposed negotiating framework: [AER - Murraylink 2023-28 - Draft Decision - Attachment 12 - Negotiated services - September 2022](#).

⁴ We published our proposed negotiated transmission services criteria for Murraylink with its initial proposal in January 2022: [AER - Proposed negotiated transmission service criteria for Murraylink - February 2022](#). The criteria were confirmed in our draft decision: [AER - Murraylink 2023-28 - Draft Decision - Attachment 12 - Negotiated services - September 2022](#).

Figure 1 Changes in regulated revenue over time (\$ million, 2022–23)

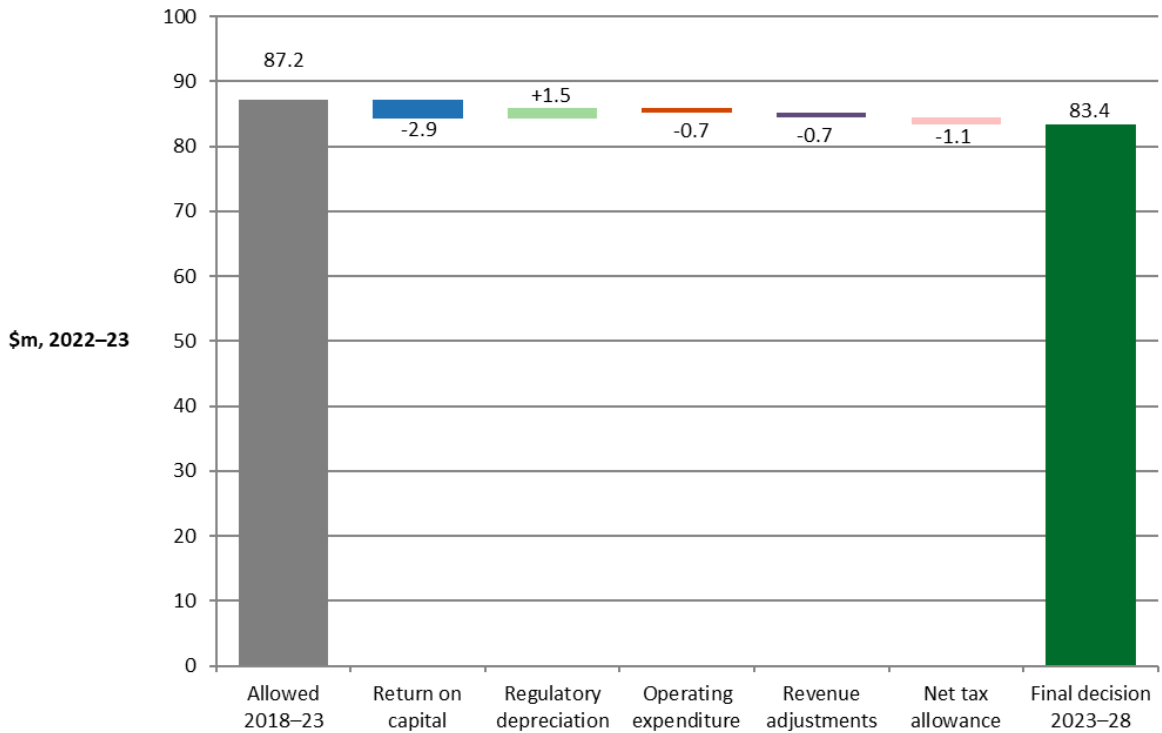


Source: AER analysis.

Note: The material increase in revenues between the initial proposal and draft decision were primarily driven by market variables such as higher interest rates we adopted at the draft decision stage.

Figure 2 shows the key drivers of the reduction in real revenue from our decision for the current, 2018-23 period to this final decision for 2023–28.

Figure 2 Changes in total revenue 2018–23 to 2023–28 (\$ million, 2022–23, unsmoothed)

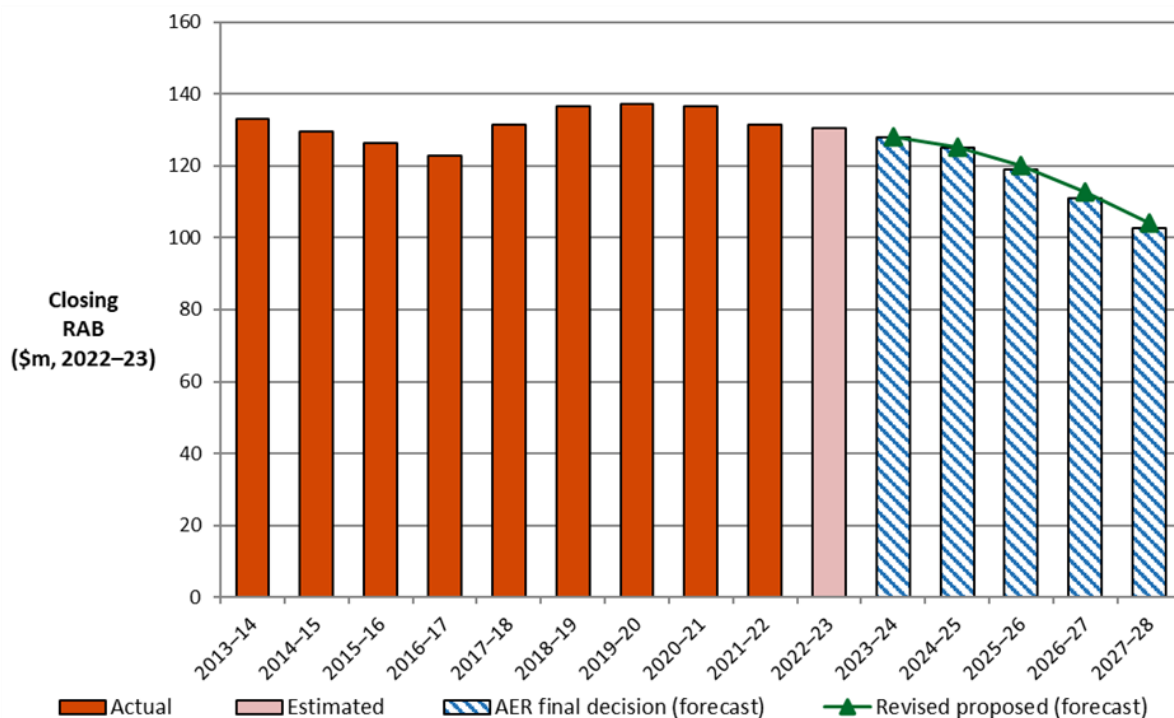


Source: AER analysis.

Forecast operating expenditure (opex) for 2023–28 is broadly consistent with actual and forecast expenditure in the current period.

The reduction in revenue reflects a lower return on capital, due to a declining regulatory asset base (RAB) as Murraylink’s forecast capex for 2023–28 falls relative to the current period. Figure 3 shows the value of Murraylink’s RAB over time. As shown below, our final decision results in a declining RAB over the 2023–28 period. It is the lowest closing RAB value compared to the previous two regulatory periods.

Figure 3 Value of Murraylink’s RAB over time – Actual, revised proposal forecast, and final decision RAB value (\$ million, 2022–23)



Source: AER analysis.

1.2 Murraylink’s consumer engagement

Our draft decision recognised that Murraylink’s engagement with consumers in the preparation of its initial proposal was an improvement from its proposal for 2018–23, for which no engagement was undertaken. We noted, however, that it was less clear to what extent, if at all, the proposal submitted to us in January was actually influenced or driven by that engagement.

We emphasised in our March 2022 issues paper and September 2022 draft decision that Murraylink’s engagement on the one outstanding element of its proposal—a solution to the potential IGBT issues—was an important opportunity for it to demonstrate its sincerity in arriving at a consumer-driven solution to that risk, and one that genuinely reflected consumer preferences.

Two workshops on IGBTs sought but to our knowledge received only limited feedback on resultant options and outcomes. At a stakeholder roundtable on 24 November 2022 (one week prior to submission of its revised proposal), Murraylink acknowledged that it was not clear capex would be needed in the 2023-28 period. That discussion also confirmed that the investment contemplated would not satisfy the NER criteria for contingent projects. Murraylink sought assurances in its revised proposal that, if IGBT-related investment was nonetheless undertaken, it would be rolled into the opening RAB at the commencement of the next period and excluded from the CESS. This approach does not appear to have been tested with stakeholders prior to submission of the proposal.

Murraylink first informed stakeholders and the AER of the other additional capex and opex items in its revised proposal after the draft decision was released, at the AER’s pre-

determination conference on 12 October 2022. These issues were subsequently touched on at the same two workshops as IGBTs. Confidentiality claims over Security of Critical Infrastructure (SoCI) expenditure, and APA's view that insurance costs for Murraylink are essentially uncontrollable, left engagement on these issues at the inform level, with little if any exploration of options. We observed no clear opportunity for, or evidence of, consumer or stakeholder influence.

We received no submissions on either element of Murraylink's revised proposal.

1.3 Key differences between our final decision and Murraylink's revised proposal

Our draft decision accepted the core components of Murraylink's January 2022 proposal, including its initial forecasts of opex and capex. However, for the reasons explained above movements in market variables led to total, draft decision revenue of \$87.4 million (\$ nominal, smoothed), \$11.7 million (15.4%) higher than Murraylink's proposal.

Murraylink's revised proposal did not accept that draft decision. It sought an additional \$2.1 million (2.4%), bringing its proposed total smoothed revenue to \$89.5 million (\$nominal, smoothed) over the 2023–28 regulatory control period.

Part of this increase results from further updates to the market variables we discussed above. For example, differences in the return on capital and regulatory depreciation between our draft decision and Murraylink's revised proposal resulted primarily from more recent inflation estimates

In our final decision, we have updated these inputs again:

- Our final decision applies a rate of return of 5.46% for the first year of the regulatory period based on the new 2022 Rate of Return Instrument and final data from Murraylink's approved averaging periods, compared to the placeholder rate of return of 5.70% in Murraylink's revised proposal, 5.56% in our draft decision and 4.25% in Murraylink's initial proposal. This has reduced the return on capital relative to Murraylink's revised proposal.
- Our final decision uses an inflation estimate of 2.92% per annum based on the Reserve Bank of Australia's February 2023 Statement of Monetary Policy, compared to the placeholder estimates of 3.50% in Murraylink's revised proposal, 3.00% in our draft decision and 2.37% in Murraylink's initial proposal. This has increased regulatory depreciation relative to Murraylink's revised proposal.

The reduction to the return on capital relative to Murraylink's revised proposal is more than offset by the higher regulatory depreciation. The increase in regulatory depreciation is partially contributing to a higher corporate income tax amount of \$1.8 million (\$ nominal) in this final decision compared to Murraylink's revised proposal of \$1.3 million.

Murraylink's revised proposal also introduced new capex and opex proposals to meet SoCI obligations, and additional opex for insurance. This expenditure was not included in Murraylink's initial proposal or contemplated at the time of our draft decision. We have not accepted it in this final decision.

- Our draft decision approved Murraylink’s proposed total forecast capex of \$12.6 million. The revised proposal sought total forecast capex of \$15 million, an increase of \$2.4 million (19%) from the draft decision. In this final decision, we have approved lower total forecast capex of \$13 million, which excludes regulatory reset costs our draft decision indicated should not form part of the capex forecast and also new SoCI capex. We discuss this in section 2.4.
- Our draft decision approved Murraylink’s proposed total forecast opex of \$22.8 million. The revised proposal seeks total forecast opex of \$25.1 million, an increase of \$2.3 million (10%) from our draft decision and Murraylink’s initial proposal. We have not endorsed Murraylink’s proposed additions to its opex forecast or the basis on which its forecast has been calculated. However, having measured Murraylink’s total forecast opex against our own (slightly higher) alternative estimate the outcomes are not materially different. In this final decision, we have therefore approved a total forecast opex amount that, while not arrived at in the same way, is equal to that in the revised proposal. We discuss this in section 2.5.

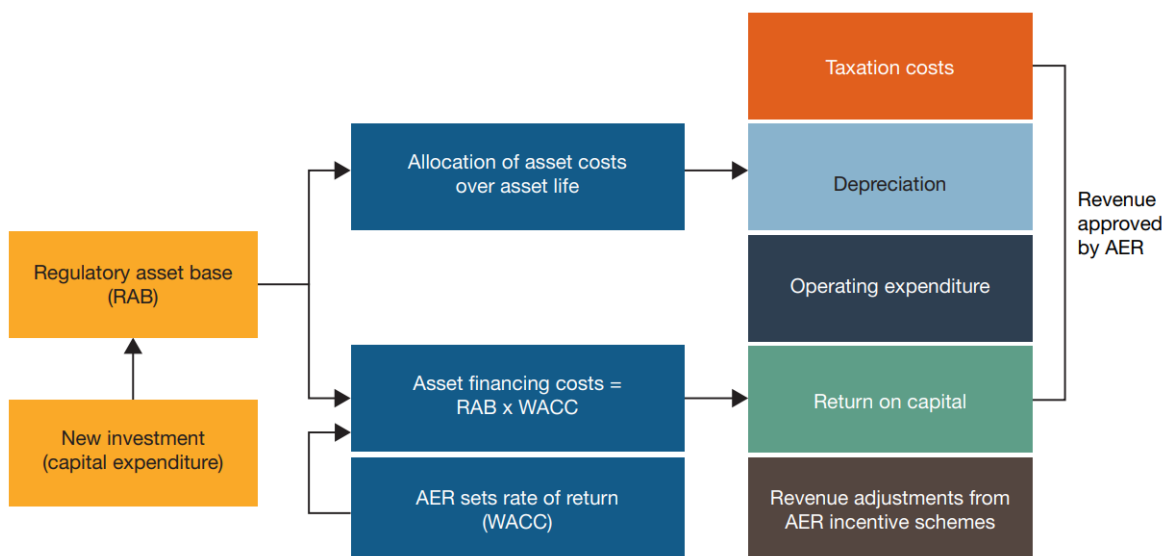
2 Key components of our final decision on revenue

The foundation of our regulatory approach is a benchmark incentive framework to setting maximum revenues: once regulated revenues are set for a five-year period, a network that keeps its actual costs below the regulatory forecast of costs retains part of the benefit. This provides an incentive for service providers to become more efficient over time. It delivers benefits to consumers as efficient costs are revealed and drive lower cost benchmarks in subsequent regulatory periods. By only allowing efficient costs in our approved revenues, we promote delivery of the NEO and ensure consumers pay no more than necessary for the safe and reliable delivery of electricity.

Murraylink’s proposed revenue reflects its forecast of the efficient cost of providing transmission network services over the 2023–28 period. Its revenue proposal, and our assessment of it under the Law and Rules, are based on a ‘building block’ approach which looks at five cost components (see Figure 4):

- return on the RAB – or return on capital, to compensate investors for the opportunity cost of funds invested in this business
- depreciation of the RAB – or return of capital, to return the initial investment to investors over time
- forecast opex – the operating, maintenance and other non-capital expenses, incurred in the provision of network services
- revenue increments/decrements – resulting from the application of incentive schemes, such as the EBSS and CESS
- estimated cost of corporate income tax.

Figure 4 The building block model to forecast network revenue



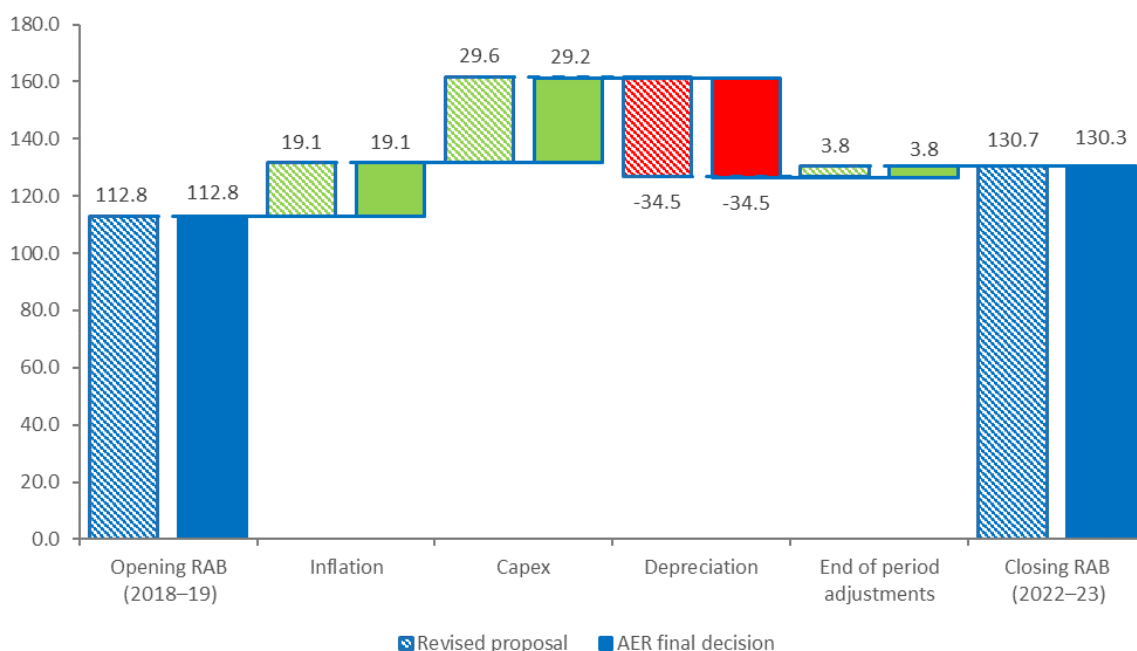
Source: AER.

2.1 Regulatory asset base

The RAB accounts for the value of regulated assets over time. To set revenue for a new regulatory period, we take the opening value of the RAB from the end of the last period and roll it forward year by year by indexing it for inflation, adding new capex and subtracting depreciation and other possible factors (such as disposals). This gives us a closing value for the RAB at the end of each year of the regulatory period. The value of the RAB is used to determine the return on capital and depreciation building blocks. It substantially impacts Murraylink’s revenue requirement, and the price consumers ultimately pay. Other things being equal, a higher RAB would increase both the return on capital and depreciation components of the revenue determination.

For this final decision, we have determined an opening RAB value of \$130.3 million (\$nominal) as at 1 July 2023. This value is \$0.4 million (0.3%) lower than Murraylink’s revised proposed opening RAB of \$130.7 million. It reflects our update to the roll forward model (RFM) for actual consumer price index (CPI) for 2022–23 and actual capex for 2021–22. Figure 5 shows the key drivers of the change in Murraylink’s RAB over the 2018–23 period compared to Murraylink’s revised proposal.

Figure 5 Key drivers of changes in the RAB over the 2018–23 period – Murraylink’s revised proposal compared with AER final decision (\$ million, nominal)



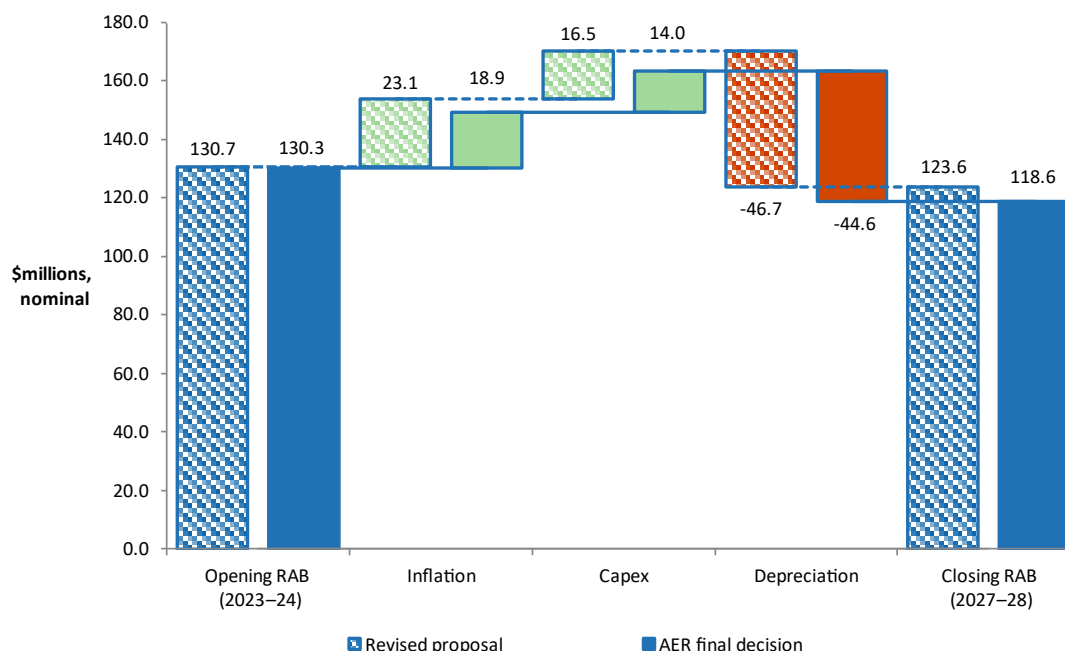
Source: AER analysis.

Note: Capex is net of disposals. It is inclusive of the half-year WACC to account for the timing assumptions in the RFM.

Figure 6 likewise shows the key drivers of the change in Murraylink’s RAB over the 2023–28 period compared to Murraylink’s revised proposal. Our final decision projects a decrease of \$11.7 million (9.0%) to the RAB by the end of the 2023–28 period compared to the \$7.1 million (5.4%) decrease from Murraylink’s revised proposal. We have determined a projected closing RAB of \$118.6 million (\$ nominal) as at 30 June 2028, which is \$5.0 million (4.0%) lower than Murraylink’s proposed \$123.6 million. This decrease is mainly due to a

lower expected inflation rate applied in our final decision. It also reflects our final decisions on the opening capital base as at 1 July 2023, forecast depreciation and forecast capex (discussed in the sections below).

Figure 6 Key drivers of changes in the RAB over the 2023–28 period – Murraylink’s revised proposal compared with AER’s final decision (\$ million, nominal)



Source: AER analysis.

Note: Capex is net of forecast disposals. It is inclusive of the half-year WACC to account for the timing assumptions in the PTRM.

2.2 Rate of return and value of imputation credits

The return each business is to receive on its capital base (the ‘return on capital’) is a key driver of proposed revenues. We calculate the regulated return on capital by applying a rate of return to the value of the capital base.

We estimate the rate of return by combining the returns of two sources of funds for investment – equity and debt. The allowed rate of return provides the business with a return on capital to service the interest rate on its loans and give a return on equity to investors. Our draft decision and Murraylink’s revised proposal applied our 2018 Rate of Return Instrument to estimate the rate of return.⁵ This final decision applies the new 2022 Rate of Return Instrument published in February 2023.⁶ This has affected the estimate of the rate of return and the value of imputation credits as follows.

⁵ AER, *Rate of return Instrument*, December 2018. See <https://www.aer.gov.au/networks-pipelines/guidelines-schemes-models-reviews/rate-of-return-guideline-2018/final-decision>

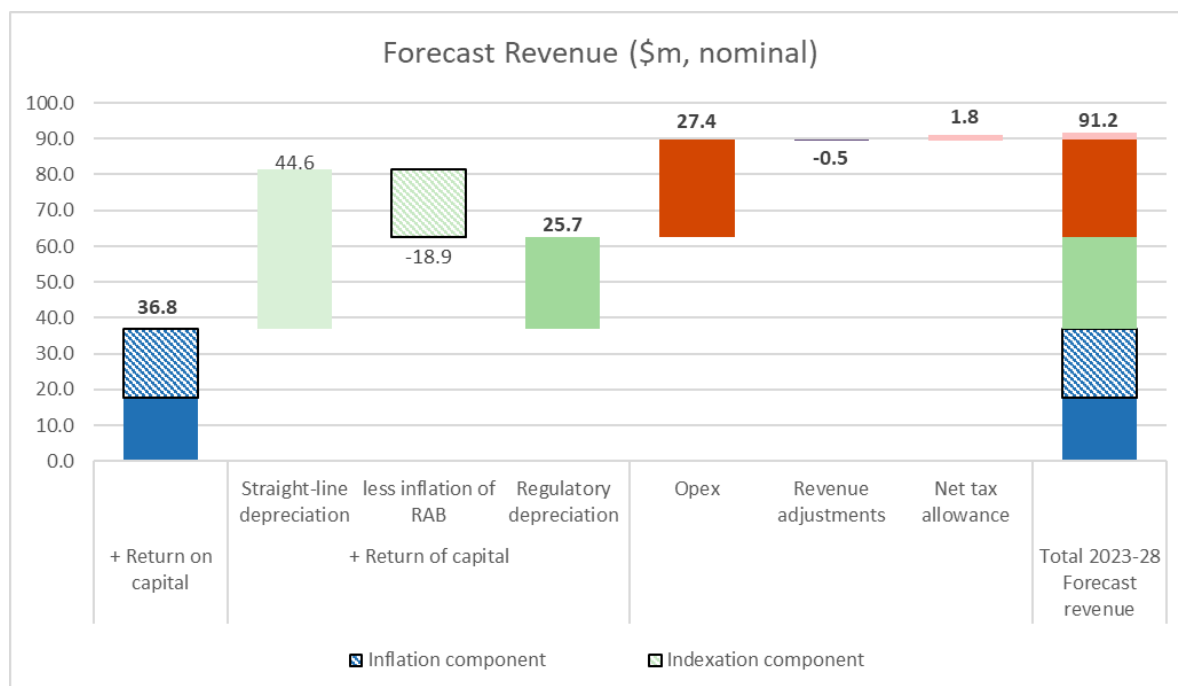
⁶ AER, *Rate of return Instrument*, February 2023. See <https://www.aer.gov.au/publications/guidelines-schemes-models/rate-of-return-instrument-2022/final-decision>

- Our final decision applies a rate of return of 5.46% for the first year of the regulatory period. This compares with the placeholder rate of return used in our draft decision (5.56%) and in Murraylink’s revised proposal (5.70%). A marginal increase in the market risk premium in the 2022 Instrument has been offset by a more significant decrease in the risk-free rate, resulting in a reduction the overall rate of return.
- Our final decision applies a value of imputation credits (gamma) of 0.57 as set out in the 2022 Instrument,⁷ compared to 0.585 in the 2018 Instrument.⁸

Our estimate of expected inflation for the purposes of this final decision is 2.92% per annum. It is an estimate of the average annual rate of inflation expected over a five-year period based on the approach adopted in our 2020 Inflation Review⁹ and the forecast from the Reserve Bank of Australia’s February 2023 Statement on Monetary Policy.¹⁰ This is a lower estimate of inflation than used in Murraylink’s revised proposal (3.50%) and our draft decision (3.00%), which were taken from earlier Statements on Monetary Policy.

Figure 7 isolates the impact of expected inflation from other parts of our final decision, to illustrate its impact on the return on capital and regulatory depreciation building blocks and the total revenue allowance. Other elements held constant, lower inflation reduces the return on capital, but increases regulatory depreciation.

Figure 7 Inflation components in final decision revenue building blocks (\$m, nominal)



Source: AER analysis.

Note: Proposed revenue in the chart is unsmoothed total revenue for the regulatory period.

⁷ AER, *Rate of return Instrument, Explanatory Statement*, February 2023, pp. 240–250.

⁸ AER, *Rate of return Instrument, Explanatory Statement*, December 2018, pp. 307–382.

⁹ AER, *Final position – Regulatory treatment of inflation*, December 2020.

¹⁰ RBA, *Statement on Monetary Policy*, February 2023, Table 1: Forecast Table. See <https://www.rba.gov.au/publications/smp/2023/feb/forecasts.html>

2.3 Regulatory depreciation

Depreciation is a method used in our decision to allocate the cost of an asset over its useful life. It is the amount provided so capital investors recover their investment over the economic life of the asset (otherwise referred to as ‘return of capital’). When determining Murraylink’s total revenue, we include an amount for the depreciation of the projected RAB. The regulatory depreciation amount is the net total of the straight-line depreciation less the indexation of the RAB.

Our final decision determines a regulatory depreciation amount of \$25.7 million (\$ nominal) for the 2023–28 period. This amount represents an increase of \$2.1 million (or 8.9%) from Murraylink’s revised proposal of \$23.6 million.

The key reason for the for the difference between our final decision and Murraylink’s revised proposal is our lower expected inflation rate for the 2023–28 period. This decreases the adjustment for indexation of the RAB that is offset against straight-line depreciation in determining regulatory depreciation.

2.4 Capital expenditure

Our final decision approves total forecast capex of \$13 million (\$2022–23). This is \$2 million (13.6%) less than Murraylink’s revised proposal, and \$0.4 million (3%) higher than our draft decision.

Our draft decision approved Murraylink’s initial proposal for total forecast capex of \$12.6 million (\$2022–23), on the basis that it was not materially different to our lower alternative estimate of \$12.4 million. The difference between us and Murraylink was that our alternative estimate did not include proposed capex of \$0.2 million for preparation of Murraylink’s next regulatory proposal. At the time of our draft decision, the difference was not considered material.

Murraylink did not accept that draft decision, and in its revised proposal sought total forecast capex of \$15 million, an increase of \$2.4 million (19%).

In addition to updating for more recent data on expected inflation, the revised proposal introduced \$2.2 million of new forecast capex for physical security work Murraylink submitted is necessary to meet SoCI obligations, following an internal APA site inspection after submission of the initial proposal. Murraylink’s initial proposal included \$0.6 million for SoCI cyber security capex, which we approved.

Murraylink submitted that a site specific investigation was undertaken on the basis of higher SoCI standards required under the Security of Critical Infrastructure Amendment Bill 2020 (SoCI 2020) and this identified additional work is now required. The additional \$2.2 million is for physical security upgrades.¹¹

We do not accept Murraylink’s \$2.2 million (\$2022–23) of new forecast physical security capex, as we do not consider that this is a prudent response to the SoCI requirements. Murraylink submitted a confidential business case and additional information, including a

¹¹ Murraylink, *Murraylink transmission determination 2023–28 – Revised Proposal*, 2 December 2022, p. 21.

site-specific risk assessment, to support its proposed SoCI capex.¹² Murraylink provided this information on a confidential basis, and therefore we have set out our assessment of it in confidential attachment 5 to this final decision.

This decision is consistent with our final decision on the APA Victorian Transmission System (VTS) access arrangement in December 2022. In that decision we did not accept APA’s proposed physical security upgrades, which were based on a similar internal risk assessment for the VTS but did accept cyber security and operation technology upgrades.¹³ Our alternative capex forecast excludes the \$2.2 million Murraylink has proposed for physical security capex.

The revised proposal also retained the \$0.2 million for regulatory reset costs which Murraylink included in its initial proposal. Our draft decision explained that these costs would be better characterised as opex costs. Because they were not related to any new regulatory obligations, we did not consider this required an increase in opex. We did not remove the \$0.2 million from total capex in the draft decision, because the amount in question did not result in a material difference between our alternative forecast of \$12.5 million and Murraylink’s initial proposal of \$12.6 million. However, our decision not to accept the new proposed \$2.2 million for additional SOCI physical security means that the difference between the revised proposal and our alternative estimate of \$13 million is now material (13.6%). Our final capex decision excludes the proposed \$0.2 million for regulatory reset costs from the total forecast capex.

Murraylink did not include any IGBT solutions in its revised proposal. It nonetheless sought assurances that if the work was to be undertaken in the next regulatory period, the IGBT capex should be rolled into the opening RAB at the commencement of the next period and that it would be reasonable to exclude any such expenditure from the CESS carryover calculation in subsequent periods.¹⁴

There is no discretion to exclude projects under the CESS guideline and given the uncertainty at this time, and future decisions that will need to be made by us in subsequent Murraylink determinations, we cannot provide these assurances. The future IGBT capex will need to meet the capex criteria under the NER, which is not something we would assess until the ex-post review as part of our determination for the subsequent period(s). Consistent with the NER we will review Murraylink’s capex ex-post in the event of an overspend, and consider the application of the CESS, in subsequent regulatory control periods (either 2028–33 or 2033–38 depending on the timing of the IGBT capex investment).

We are also required to provide a statement on whether the roll forward of the regulatory asset base from the previous period contributes to the achievement of the capital

¹² Murraylink, *Murraylink transmission determination 2023–28 – Revised Proposal – Attachment 3 Murraylink SoCI Business Case (Confidential)*, 2 December 2022.

¹³ AER, *Final Decision, APA Victorian Transmission System (VTS) Access Arrangement 2023 to 2027 (1 January 2023 to 31 December 2027) – Attachment 5 – Capital Expenditure*, December 2022, p. 36 and *Final Decision APA Victorian Transmission System (VTS) Access Arrangement 2023 to 2027 (1 January 2023 to 31 December 2027) – Attachment 5 – Appendix A Capital expenditure (Confidential)*.

¹⁴ Murraylink, *Murraylink transmission determination 2023–28 – Revised Proposal*, 2 December 2022, pp. 1–2 and pp. 25–26.

expenditure incentive objective.¹⁵ We have reviewed Murraylink’s capex performance for the 2016–17 to 2020–21 regulatory years. Our ex post review is outlined in our draft decision.¹⁶ Based on our analysis, we consider that Murraylink’s total actual capex for the ex post review period is likely to reasonably reflect the capex criteria.

2.5 Operating expenditure

Our final decision accepts the total opex forecast of \$25.1 million (\$2022–23) in Murraylink’s revised proposal.

Our approach to assessment of forecast opex looks at the forecast opex proposed over the regulatory control period at a total level, rather than to assess and approve 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.¹⁷ 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.¹⁸ If we are not satisfied, we substitute the business’s forecast with our alternative estimate that we are satisfied reasonably reflects the opex criteria.¹⁹ 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.

Our draft decision approved the total forecast opex of \$22.8 million in Murraylink’s initial proposal, on the basis that it was not materially different to our higher alternative estimate of \$25.8 million (a difference of \$3 million, or \$1.3 million if inflation were on like-for-like terms).

Murraylink’s initial proposal was based on a simplified version of our base-step-trend approach that:

- used opex in 2020–21 as the base to forecast
- did not include our standard final year increment from the base year
- proposed no opex trend for price, output or productivity growth
- proposed no step changes
- added forecast debt raising costs.

The difference between our alternative estimate and Murraylink’s initial proposal resulted from our application of our standard approach compared to this simplified one and updates to actual and forecast inflation.

Murraylink’s revised proposal did not accept our draft decision. It sought instead to reopen its opex proposal to introduce two new step changes and seek total forecast opex of

¹⁵ NER, 6.12.2 (b).

¹⁶ AER, *Draft decision, Murraylink transmission determination 2023–28, Attachment 5 – Capital Expenditure*, September 2022, pp. 20–22.

¹⁷ 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.'

¹⁸ NER, cl. 6A.6.6(c).

¹⁹ NER, cll. 6A.6.6(d) and 6A.14.1(3)(ii).

\$25.1 million, an increase of \$2.3 million (10%) from our draft decision and Murraylink’s initial proposal, including:

- a new proposal for additional forecast opex for SoCI cyber costs (\$0.48 million), resulting from a change in the allocation of APA cyber costs to Murraylink
- a new proposal for expected increases in insurance premiums (\$1.51 million)
- updates for inflation and debt raising costs.

In accepting the total opex forecast in Murraylink’s revised proposal, we have not endorsed:

- Murraylink’s new proposed step change for costs to comply with new security of critical infrastructure requirements. Murraylink did not provide sufficient evidence with its revised proposal to determine the efficient additional expenditure it needs, if any, to comply with these obligations.
- Murraylink’s proposal for a new step change or category specific forecast for insurance costs in our alternative estimate. Murraylink’s revised proposal double counted forecast inflation in its category specific forecast for insurance. Calculated correctly, the step change would be only \$0.3 million. We do not consider a step change is required for such a small increase because this should be covered by forecast price growth.

However, because Murraylink again chose not to adopt our standard approach to forecast opex in its revised proposal (and maintained the simple approach it used for its initial proposal), our alternative estimate of forecast opex is still not materially different to Murraylink’s even when these new step changes are removed. Our position on Murraylink’s proposed new step changes, therefore, does not change our decision to accept Murraylink’s revised proposal.

The total opex forecast approved in this final decision is broadly consistent with the actual opex Murraylink has incurred in the current period. It is \$0.6 million (2.6%) higher than Murraylink’s actual and expected opex in the current period, and \$2.0 million (8.6%) higher than the forecast opex we approved for the current period, including adjustments for negative cost pass throughs in 2018–19 to 2022–23 due to reduced connection charges.

2.6 Revenue adjustments

Our calculation of Murraylink’s total revenue includes adjustments under the EBSS and CESS that applied in its determination for the current period. These mechanisms provide a continuous incentive for Murraylink to pursue efficiency improvements in opex and capex, and a fair sharing of these between Murraylink and its users.

Our final decision includes a larger revenue adjustment of \$0.60 million (\$2022–23) under the CESS than the \$0.47 million in our draft decision and Murraylink’s revised proposal. This takes into account more recent inflation figures, updated WACC input information, and updated 2022 capex consistent with our roll forward model.

We have also included an adjustment of –\$1.1 million (\$2022–23) under the EBSS in place of the revenue adjustment of –\$1.9 million in Murraylink’s revised proposal and our draft decision. This smaller adjustment takes into account a negative pass through amount we approved after the revised proposal was submitted, to return the difference between forecast

and actual connection charges to consumers.²⁰ Our calculation also updates forecast inflation for the year to June 2023 to reflect the forecast in the RBA’s February Statement on Monetary Policy and updates actual opex for 2021–22 to reflect Murraylink’s now available regulatory accounts for 2021–22. The calculation of these revenue decrements is in our final decision EBSS model, which we have published with this final decision.

The combined effect of these revenue adjustments is a –\$0.5 million (\$2022–23) revenue adjustment building block compared to Murraylink’s revised proposal of –\$1.4 million.

2.7 Corporate income tax

Our determination of the total revenue requirement includes the estimated cost of corporate income tax for 2023–28 period. Under the post-tax framework, this amount is calculated as part of the building blocks assessment using our post-tax revenue model (PTRM).

Our final decision determines an estimated cost of corporate income tax amount of \$1.8 million (\$ nominal) for Murraylink over the 2023–28 period. This is \$0.5 million (34.6%) higher than Murraylink’s revised proposal of \$1.3 million. This increase is primarily due to a higher regulatory depreciation and a lower tax depreciation amount²¹ determined in our final decision, which in turn increased Murraylink’s taxable income and therefore the cost of corporate income tax.

²⁰ AER - Murraylink - Determination - 2021–22 Connection Charge CPT – February 2023

²¹ This is mainly due a lower forecast as-commissioned capex determined in the final decision. All else equal, a lower forecast as-commissioned capex will decrease tax depreciation, a component of the tax expense, and increase the cost of corporate income tax.

3 Incentive schemes and allowances

Incentive schemes are a component of incentive-based regulation and complement our approach to assessing efficient costs. They provide important balancing incentives under network determinations, encouraging businesses to pursue expenditure efficiencies while maintaining the reliability and overall performance of the network. Our final decision confirms that the following incentive schemes will apply to Murraylink in the 2023–28 period:

- Version 2 of the Efficiency benefit sharing scheme (EBSS). This provides a continuous incentive to pursue efficiency improvements in opex and provide for a fair sharing of these between Murraylink and network users. Consumers benefit from improved efficiencies through lower opex in regulated revenues for future periods. In calculating EBSS carryover amounts, we will exclude cost categories and make the adjustments required by the EBSS. These exclusions and adjustments are set out in our draft decision.
- Version 1 of the Capital expenditure sharing scheme (CESS). This incentivises efficient capex throughout the period by rewarding efficiency gains and penalising efficiency losses, each measured by reference to the difference between forecast and actual capex. Consumers benefit from improved efficiencies through a lower RAB, which is reflected in regulated revenues for future periods.
- Version 5 of the Service target performance incentive scheme (STPIS). The purpose of the STPIS is to provide incentives to transmission network service providers to improve or maintain a high level of service for the benefit of participants in the National Electricity Market and end users of electricity. The STPIS targets and incentive rates that will apply to the 2023-28 period have been published with this final decision.

This is consistent with the position taken in our Framework and Approach paper and in our September 2022 draft decision. We received no submissions on the application of incentive schemes and allowances to Murraylink.

Our final decision is that the Demand Management Innovation Allowance Mechanism (DMIAM) will not apply to Murraylink. As we observed in our draft decision, under the current operational framework, we consider that there would be very limited utility to energy users were Murraylink to invest in researching demand management opportunities through the DMIAM.²²

²² AER - Murraylink 2023-28 - Draft Decision - Overview - September 2022, p. 14.

A Constituent decisions

Our final decision on Murraylink’s transmission revenue determination for the 2023–28 regulatory control period includes the following constituent components:²³

Constituent component
<p>In accordance with clause 6A.14.1(1)(i) of the NER, the AER’s final decision is not to approve the total revenue cap set out in Murraylink’s revised building block proposal. Our decision on Murraylink’s total revenue cap is \$90.9 million (\$ nominal, smoothed) for the 2023–28 regulatory control period. This decision is discussed in Attachment 1 of this final decision.</p>
<p>In accordance with clause 6A.14.1(1)(ii) of the NER, the AER’s final decision is not to approve the maximum allowed revenue (MAR) for each regulatory year of the regulatory control period set out in Murraylink’s revised building block proposal. Our decision on Murraylink’s MAR for each year of the 2023–28 regulatory control period is set out in this Attachment 1 of this final decision.</p>
<p>In accordance with clause 6A.14.1(1)(iii) of the NER, the AER’s final decision is to apply the service component and market impact component of Version 5 of the service target performance incentive scheme (STPIS) to Murraylink for the 2023–28 regulatory control period. The values and parameters of the STPIS that are approved by the AER are set out in the AER – Murraylink 2023-28 – Final decision - STPIS targets and parameters – April 2023 spreadsheet accompanying this final decision for Murraylink.</p>
<p>In accordance with clause 6A.14.1(1)(iv) of the NER, the AER’s final decision on the values that are to be attributed to the parameters for the efficiency benefit sharing scheme (EBSS) that will apply to Murraylink in respect of the 2023–28 regulatory control period are set out in version 2 of the EBSS and Attachment 8 to our draft decision.</p>
<p>In accordance with clause 6A.14.1(1)(v) of the NER, the AER’s final decision is to approve the commencement and length of the regulatory control period as Murraylink proposed in its revenue proposal. The regulatory control period will commence on 1 July 2023 and the length of this period is five years, expiring on 30 June 2028.</p>
<p>In accordance with clause 6A.14.1(2)(i) of the NER and acting in accordance with clause 6A.6.7(c), the AER’s final decision is not to accept Murraylink’s proposed total forecast capital expenditure of \$15 million (\$2022). Our final decision therefore includes a substitute estimate of total forecast capex for the 2023-28 regulatory control period of \$13 million. The reasons for our final decision are set out in this Overview and Attachment 5 to the AER’s September 2022 draft decision.</p>
<p>In accordance with clause 6A.14.1(3)(i) of the NER and acting in accordance with clause 6A.6.6(c), the AER’s final decision is to accept Murraylink’s proposed total forecast operating expenditure inclusive of debt raising costs of \$25.1 million (\$2022). The reasons for our final decision are set out in section 2.5 of this Overview and Attachment 6 to the AER’s September 2022 draft decision.</p>

²³ NEL, s. 16(1)(c).

Constituent component
<p>Murraylink did not propose any contingent projects for the 2023–28 regulatory control period. In accordance with clause 6A.14.1(4)(i) of the NER the AER has determined that there are no contingent projects for the purposes of this revenue determination.</p>
<p>In accordance with clause 6A.14.1(5A) of the NER, the AER’s final decision is that version 1 of the capital expenditure sharing scheme (CESS) as set out in the Capital Expenditure Incentives Guideline will apply to Murraylink in the 2023–28 regulatory control period. Our reasons for this were set out in Attachment 9 to the AER’s September 2022 draft decision.</p>
<p>In accordance with clause 6A.14.1(5A) of the NER, the AER’s final decision is that the demand management innovation allowance mechanism (DMIAM) for electricity transmission networks will not apply to Murraylink in the 2023–28 regulatory control period.</p>
<p>In accordance with clause 6A.14.1(5B) and 6A.6.2 of the NER, the AER’s final decision is that the allowed rate of return for the 2022–23 regulatory year is 5.46% (nominal), as set out in Attachment 3 of this final decision. The rate of return for the remaining regulatory years 2024–28 will be updated annually because our decision is to apply a trailing average portfolio approach to estimating debt which incorporates annual updating of the allowed return on debt.</p>
<p>In accordance with clause 6A.14.1(5C) of the NER, the AER’s final decision is that the value of imputation credits as referred to in clause 6A.6.4 is 0.57. This is set out in Attachment 3 of this final decision.</p>
<p>In accordance with clause 6A.14.1(5D) of the NER, the AER’s final decision, in accordance with clause 6A.6.1 and schedule 6A.2, is that the opening regulatory asset base (RAB) as at the commencement of the 2023–28 regulatory control period, being 1 July 2023, is \$130.3 million (\$ nominal). This is set out in Attachment 2 of this final decision.</p>
<p>In accordance with clause 6A.14.1(5E) of the NER, the AER’s final decision is that the depreciation approach used to establish the RAB at the commencement of Murraylink’s regulatory control period as at 1 July 2028 is based on forecast capex (forecast depreciation). Our reasons for this were set out in Attachment 2 of this final decision. We also note that the regulatory depreciation amount that is approved in this decision is \$25.7 million (\$ nominal) for the 2023–28 regulatory control period.</p>
<p>In accordance with clause 6A.14.1(8) of the NER, the AER’s draft decision is to approve Murraylink’s proposed pricing methodology submitted on 31 January 2022. Our reasons for this were set out in Attachment 11 to the AER’s September 2022 draft decision.</p>
<p>Murraylink did not propose any additional cost pass through events for the 2023–28 regulatory control period. In accordance with clause 6A.14.1(9) of the NER, the AER’s final decision is that no additional pass through events will apply to Murraylink for the 2023–28 regulatory control period.</p>
<p>By virtue of clause 11.98.8 of the NER, the provisions for negotiated transmission services in version 109 of the NER continue to apply in Victoria. Under clauses 6A.2.2(3) and 6A.14.1(6) of version 109 of the NER, the AER’s final decision is to approve Murraylink’s proposed negotiating framework submitted on 31 January 2022. The reasons for this decision were set out in Attachment 12 to the AER’s September 2022 draft decision.</p>

Constituent component

By virtue of clause 11.98.8 of the NER, the provisions for negotiated transmission services in version 109 of the NER continue to apply in Victoria. In accordance with clause 6A.14.1(7) of version 109 of the NER the negotiated transmission services criteria for Murraylink are those specified in Attachment 12 to the AER's September 2022 draft decision.

Glossary

Term	Definition
2018 Instrument	2018 Rate of Return Instrument
2022 Instrument	2022 Rate of Return Instrument
AEMO	Australian Energy Market Operator
AER	Australian Energy Regulator
Capex	Capital expenditure
CESS	Capital expenditure sharing scheme
CPI	Consumer price index
DMIAM	Demand management innovation allowance mechanism
EBSS	Efficiency benefit sharing scheme
Gamma	Value of imputation credits
IGBT	Insulated gate bipolar transistor
MAR	Maximum allowed revenue
NEL	National Electricity Law
NEO	National Electricity Objective
NER	National Electricity Rules
Opex	Operating expenditure
PTRM	Post-tax revenue model
RAB	Regulatory asset base
RBA	Reserve Bank of Australia
RIN	Regulatory information notice
RFM	Roll forward model
SoCI	Security of critical infrastructure
STPIS	Service target performance incentive scheme