



FINAL DECISION

Murraylink transmission determination 2018 to 2023

Overview

April 2018

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or: publishing.unit@acc.gov.au.

Inquiries about this publication should be addressed to:

Australian Energy Regulator
GPO Box 520
Melbourne Vic 3001

Tel: 1300 585 165

Email: AERInquiry@aer.gov.au

Note

This Overview forms part of the AER's final decision on Murraylink's transmission determination for 2018–23. It should be read together with all other parts of the final decision. Our final decision includes this Overview and the following attachments:

Murraylink transmission determination 2018–2023

Attachment 1 – Maximum allowed revenue

Attachment 2 – Regulatory asset base

Attachment 3 – Rate of return

Attachment 5 – Regulatory depreciation

Attachment 6 – Capital expenditure

Attachment 8 – Corporate income tax

Attachment A – Negotiating framework

Attachment B – Pricing methodology

As many issues were settled at the draft decision stage or required only minor updates, we have not prepared other attachments. For ease of reference, the above attachments have been numbered consistently with the attachment numbering in our draft decision. In these attachments and other elements of our final decision, our draft decision reasons form part of this final decision.

Contents

Note	1-2
Contents	3
Shortened forms	5
1 Our final decision	7
1.1 What is driving revenue	8
1.2 Expected impact of our final decision on residential electricity bills	10
2 Key elements of our decision on revenue.....	12
2.1 Key differences between our draft and final decisions	15
2.2 Regulatory asset base.....	16
2.3 Forecast inflation.....	17
2.4 Rate of return (return on capital) and value of imputation credits (gamma).....	18
2.5 Regulatory depreciation (return of capital)	20
2.6 Capital expenditure.....	21
Contingent project.....	22
2.7 Operating expenditure.....	23
2.8 Corporate income tax	25
3 Incentive schemes.....	26
3.1 Efficiency benefit sharing scheme (EBSS).....	26
Murraylink updated its historical operating expenditure	27
3.2 Capital expenditure sharing scheme (CESS)	28
3.3 Service target performance incentive scheme (STPIS)	29
4 Price terms and conditions.....	30
4.1 Pricing methodology	30

4.2	Cost pass through	30
4.3	Negotiating framework.....	31
5	Understanding the NEO	32
5.1	Achieving the NEO to the greatest degree	33
5.2	Interrelationships between constituent components	33
A	Constituent components	35
B	List of submissions	37

Shortened forms

Shortened form	Extended form
AARR	aggregate annual revenue requirement
AEMC	Australian Energy Market Commission
AEMO	Australian Energy Market Operator
AER	Australian Energy Regulator
ARORO	allowed rate of return objective
ASRR	annual service revenue requirement
augex	augmentation expenditure
capex	capital expenditure
CCP	Consumer Challenge Panel
CCP 9	Consumer Challenge Panel, sub panel 9
CESS	capital expenditure sharing scheme
CPI	consumer price index
DRP	debt risk premium
EBSS	efficiency benefit sharing scheme
ERP	equity risk premium
MAR	maximum allowed revenue
MRP	market risk premium
NEL	national electricity law
NEM	national electricity market
NEO	national electricity objective
NER	national electricity rules
NSP	network service provider
NTSC	negotiated transmission service criteria
opex	operating expenditure
PADR	project assessment draft report

PTRM	post-tax revenue model
PSCR	project specification consultation report
RAB	regulatory asset base
RBA	Reserve Bank of Australia
repex	replacement expenditure
RFM	roll forward model
RIN	regulatory information notice
RIT-T	regulatory investment test for transmission
RPP	revenue and pricing principles
SLCAPM	Sharpe-Lintner capital asset pricing model
STPIS	service target performance incentive scheme
TNSP	transmission network service provider
TUoS	transmission use of system
WACC	weighted average cost of capital

1 Our final decision

The Australian Energy Regulator (AER) works to make all Australian energy consumers better off, now and in the future. We regulate energy networks in all jurisdictions except Western Australia. Our work is guided by the National Electricity Objective (NEO) which promotes efficient investment in, and operation and use of, electricity services in the long term interests of consumers.¹ We set network revenues so that they reflect efficient costs. By only allowing efficient costs we regulate network prices so that energy consumers pay no more than necessary for the safe and reliable delivery of electricity services.

Murraylink is a privately-owned transmission interconnector between South Australia and Victoria. We regulate the revenues that Murraylink can recover from its customers. This final decision concerns the maximum allowed revenue (MAR) that Murraylink can earn from its regulated services for the regulatory control period from 1 July 2018 to 30 June 2023.

Our final decision is to allow Murraylink to recover \$81.4 million (\$nominal, smoothed) from its customers over the 2018–23 regulatory control period.

This final decision is the product of a long consultation process. This was initiated by consultation on the Framework and Approach in November 2016. In February 2017, we published Murraylink’s initial proposal on our website and called for submissions. In March we published an issues paper on Murraylink’s proposal and hosted a public forum in April. We made our draft decision in September 2017² and Murraylink submitted its revised proposal on 1 December 2017.

In preparing its initial and revised proposals Murraylink had not taken steps to engage with consumers and this was a concern expressed by a number of stakeholders. These concerns were also raised by the consumer challenge panel (CCP9):

The CCP9 found Murraylink’s approach to Consumer Engagement (CE) to be profoundly disappointing. Despite the requirements under the NER and the AER’s Guideline, Murraylink has made no effort to engage stakeholders other than its business-as-usual process contacts.³

...

In its revised proposal, ML [Murraylink] has clearly missed the opportunity to effectively respond to the concerns raised by consumer and government

¹ NEL, s. 7.

² AER, *Draft Decision, Murraylink transmission determination 2018 to 2023, Overview*, September 2017. <https://www.aer.gov.au/networks-pipelines/determinations-access-arrangements/murraylink-determination-2018-23/draft-decision>

³ Consumer Challenge Panel Sub-Panel 9, *Response to Draft Decision and Revised Proposal for Revenue Reset for Murraylink for 2018–2023*, 29 January 2018, p. 3.

*stakeholders and to develop a broadly based customer engagement program and illustrate how this engagement has informed its revised proposal, including the proposed contingent project.*⁴

We consider that Murraylink should engage with customers in Victoria and South Australia. As a regulated transmission network service provider connecting South Australia and Victoria, its costs are ultimately borne by customers in these States. We consider that Murraylink must do more consumer engagement, consistent with our consumer engagement guideline and not simply leave this to the regulatory determination process. Murraylink has now expressed a preparedness to extend its stakeholder engagement beyond its customers to engage with a broader range of stakeholders in relation to its next revenue proposal in January 2021.⁵ Although we are encouraged to see Murraylink acknowledge this shortcoming, this does not detract from our disappointment that Murraylink had the opportunity to engage with consumers in this review and chose not to.

This overview explains our final decision and how it affects customers.⁶ We settled a number of issues with Murraylink's proposal when we made our draft decision. Murraylink and stakeholders accepted our draft decision on a number of components, including operating expenditure, inflation and the value of imputation credits (gamma).⁷

The key outstanding matters addressed in this final decision is Murraylink's proposed return on equity and forecast capital expenditure (capex). We accept Murraylink's revised capex but not its proposed rate of return (return on equity).

We received three submissions on our draft decision and Murraylink's revised proposal.⁸

1.1 What is driving revenue

Figure 1.1 compares our final decision on Murraylink's revenue for 2018–23 to its proposed revenue and to the revenues allowed and recovered during previous regulatory control periods (2008–13 and 2013–18).

Our final decision allows for annual revenue that is higher in real terms than at the start of the previous regulatory period and will increase gradually over the period. Murraylink's revenue has been reducing steadily over the past 15 years as the initial capital investment for the Murraylink asset depreciated. During this period, Murraylink has not had to incur any substantial reinvestment in capital given the age of the asset.

⁴ Consumer Challenge Panel Sub-Panel 9, *Response to Draft Decision and Revised Proposal for Revenue Reset for Murraylink for 2018–2023*, 29 January 2018, p. 8.

⁵ Murraylink, *Murraylink revised revenue proposal effective July 2018 to June 2023*, December 2017, p. 9.

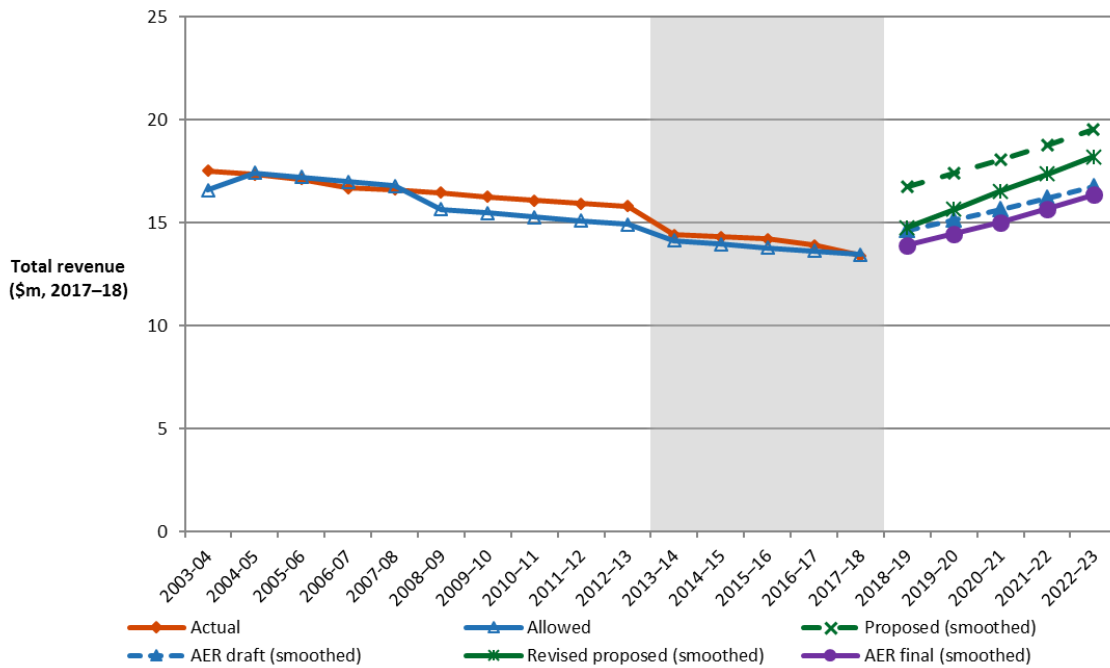
⁶ Our Murraylink transmission determination 2018–2023 sets out the specific constituent decisions we are required to make under the NER.

⁷ Other areas settled on the draft decision include depreciation, incentive schemes, the pricing methodology, pass through events and the negotiated services framework.

⁸ A list of submissions is set out in Appendix B.

However, it is now at a point where a key component – the control systems – is coming to the end of its life and is considered obsolete. It is this control systems upgrade required to maintain the continued reliability and security of supply across the interconnector that is driving the upturn in revenue over the 2018–23 regulatory control period.

Figure 1.1 Murraylink's past total revenue, proposed total revenue and AER final decision total revenue allowance (\$million, 2017–18)



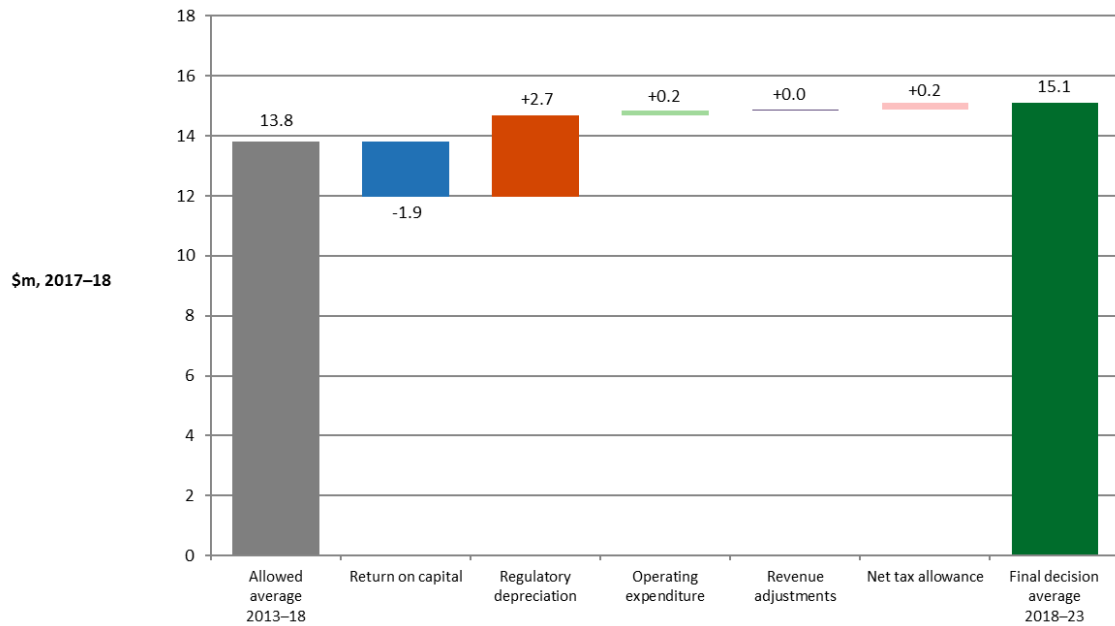
Source: AER analysis.

Our final decision approves average annual revenues for the 2018–23 regulatory control period that are \$1.3 million (\$2017–18)—or 9.4 per cent—higher than approved in our decision for 2013–18 in real dollar terms.⁹

Figure 1.2 compares our final decision for the 2018–23 regulatory control period with Murraylink's allowed revenue for the 2013–18 regulatory control period, broken down by the various building block components that make up the forecast revenue allowance. These are annual amounts based on an average of unsmoothed revenues over the two five-year regulatory control periods.

⁹ The comparison of the average annual revenues between the 2013–18 and 2018–23 regulatory control periods is based on smoothed revenues. In nominal dollar terms, our final decision average annual revenues for the 2018–23 regulatory control period is about \$2.8 million (or 20.5 per cent) higher than the average annual revenues approved for the 2013–18 regulatory control period.

Figure 1.2 AER's final decision for 2018–23 and Murraylink's 2013–18 allowed average annual building block costs (\$million, 2017–18)



Source: AER analysis.

These figures highlight that regulatory depreciation and return on capital are the key differences between our final decision for the 2018–23 regulatory control period and Murraylink's allowed revenue for the 2013–18 regulatory control period. These largely offset each other. The remainder of the changes between the two periods are a slight increase in opex and net tax allowance.

The reduction in the return on capital shown in Figure 1.2 is driven by changes in the estimated rates of return on debt and equity. The estimated return on debt and return on equity fell between regulatory periods by 2.1 and 1.3 percentage points, respectively. The falls were largely caused by a reduction in the risk-free rate and the debt risk premium. However, the equity beta we have used also fell from 0.8 for the 2013–18 regulatory control period to 0.7 for the 2018–23 regulatory control period reducing the estimated equity risk.¹⁰

1.2 Expected impact of our final decision on residential electricity bills

The annual electricity bill for customers in each region in the national electricity market will reflect the combined cost of all the electricity supply chain components – wholesale generation costs, transmission and distribution network costs, the retailers' costs and profit margin, and the cost of environmental policies including subsidies for renewable energy, such as solar feed-in tariffs. The transmission network charge component of

¹⁰ See Attachment 3 – Rate of Return of this final decision.

electricity bills for SA and VIC represent about 9 per cent of an average customer's annual electricity bill in SA and about 6 per cent in VIC.¹¹

Murraylink's network charges are built into transmission charges in SA and VIC. The main transmission service providers in each region (ElectraNet in SA and AusNet Services in VIC) take a portion of Murraylink's allowed revenue in developing the applicable transmission charges to apply to and collect from customers in their respective regions.^{12 13} Murraylink is then compensated by ElectraNet and AusNet.

Murraylink is a small component of the broader transmission networks that serve SA and VIC.¹⁴ This small proportion explains the modest impact this final decision on Murraylink is likely to have on average annual electricity bills in SA and VIC.

We have provided an estimate of the combined effect of our final decisions for the ElectraNet and Murraylink transmission determinations on transmission charges and electricity bills in South Australia over the 2018–23 regulatory control period. This is discussed in our final decision for ElectraNet which has been published at the same time as this Murraylink decision.¹⁵

¹¹ AEMC, *Final Report: 2017 Residential electricity price trends*, December 2017, pp. 124, 136.

¹² Murraylink's annual expected revenue is apportioned 45 per cent to South Australia and 55 per cent to Victoria.

¹³ ElectraNet, as the coordinating transmission network service provider for South Australia, takes a portion of Murraylink's expected revenue in developing the transmission charges to apply to customers. We have made a final decision on ElectraNet's revenue proposal for the 2018–23 regulatory control period, which coincides with Murraylink's period. AusNet Services is the coordinating transmission network service provider for Victoria. Its transmission determination for the 2017–22 regulatory control period was completed earlier in April 2017 and does not align with Murraylink's period. As a result, the bill impacts for Victorian customers in AusNet Services' transmission determination did not incorporate this decision for Murraylink.

¹⁴ Murraylink's expected revenue in the 2018–23 period is about five per cent of ElectraNet's expected revenue.

¹⁵ AER, *Final decision ElectraNet transmission determination 2018 to 2023*, April 2018.

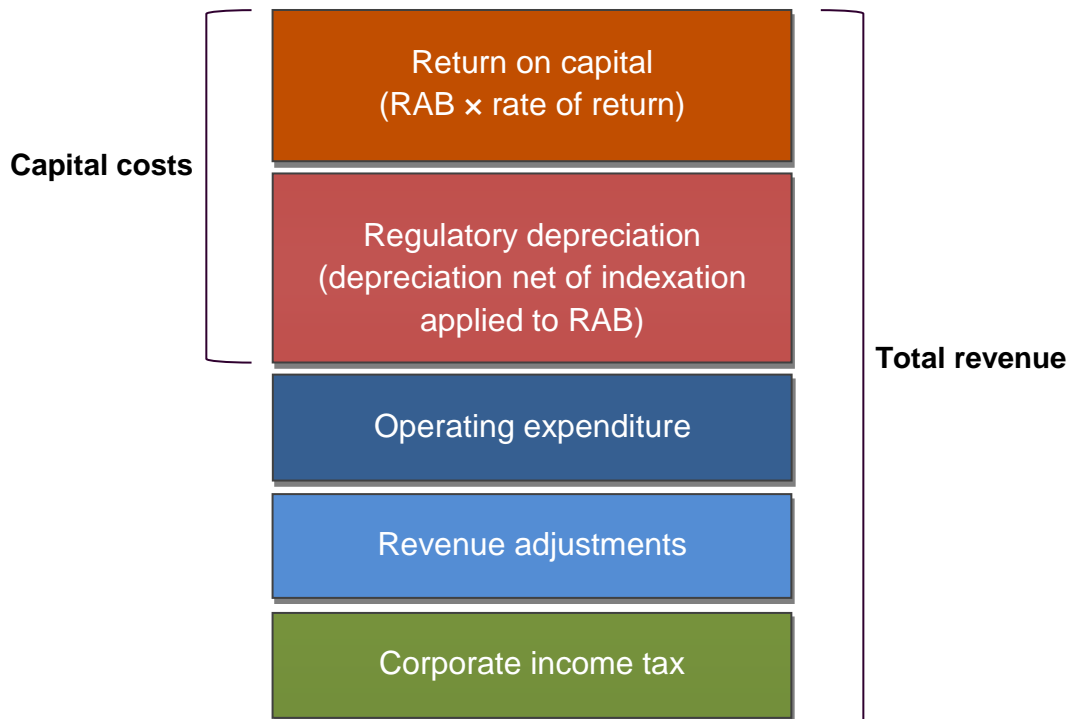
2 Key elements of our decision on revenue

Our final decision revenue for Murraylink is made up of a number of components or 'building blocks'.

The building block costs are illustrated in Figure 2.1 and include:

- a return on the regulatory asset base (RAB) (or return on capital)
- depreciation of the RAB (or return of capital)
- forecast operating expenditure
- revenue adjustments (increments or decrements) resulting from incentive schemes such as the efficiency benefit sharing scheme (EBSS)
- the estimated cost of corporate income tax.

Figure 2.1 The building block approach for determining total revenue



The building block costs are comprised of key elements that we determine through our assessment process. For example, the size of the RAB—and therefore the revenue generated from the return on capital and regulatory depreciation building blocks—is directly affected by our assessment of forecast capex.

Figure 2.2 compares the average annual building block revenue from our final decision to that proposed by Murraylink for the 2018–23 regulatory control period, and to the approved average amount for the 2013–18 regulatory control period.

The return on capital has been reduced due to the lower rate of return we approved in our final decision. Regulatory depreciation is forecast to increase in the 2018–23 regulatory control period compared to the 2013–18 due to Murraylink’s historical capex exceeding its capex allowance and the higher forecast capex in our final decision.

Figure 2.2 AER's final decision on constituent components of average annual revenue (\$million, 2017–18)

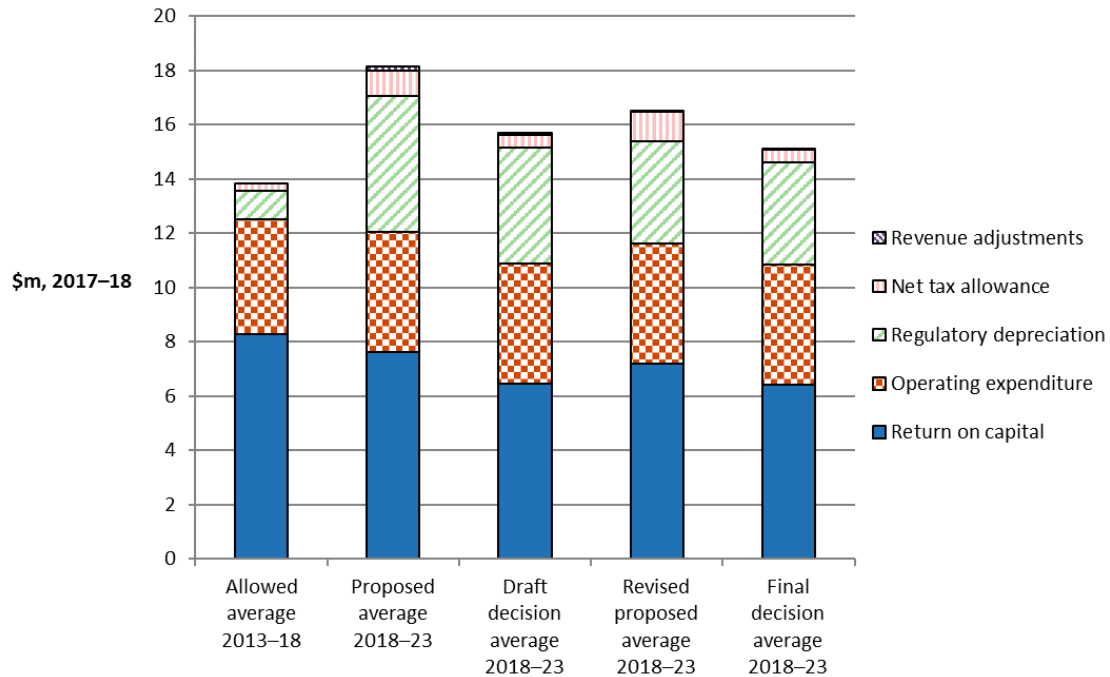


Table 2.1 shows our final decision on Murraylink's revenues including the building block components.

Table 2.1 AER's final decision on Murraylink's revenues for the 2018–23 period (\$million, nominal)

	2018–19	2019–20	2020–21	2021–22	2022–23	Total
Return on capital	6.4	6.5	7.0	7.4	7.3	34.6
Regulatory depreciation ^a	3.4	3.6	3.6	3.7	5.8	20.2
Operating expenditure ^b	4.5	4.6	4.8	4.8	5.1	23.8
Revenue adjustments ^c	–0.2	–0.2	0.5	0.0	0.1	0.2
Net tax allowance	0.4	0.4	0.5	0.5	0.6	2.5
Annual building block revenue requirement (unsmoothed)	14.6	14.9	16.4	16.5	19.0	81.4
Annual expected MAR (smoothed)	14.3	15.2	16.2	17.3	18.5	81.4 ^d
X factor ^e	n/a ^f	–3.86%	–3.86%	–4.40%	–4.40%	n/a

Source: AER analysis.

- (a) Regulatory depreciation is straight-line depreciation net of the inflation indexation on the opening RAB.
- (b) Operating expenditure includes debt raising costs.
- (c) Includes efficiency benefit sharing scheme amounts.
- (d) The estimated total revenue cap is equal to the total annual expected MAR.
- (e) The X factors will be revised to reflect the annual return on debt update. Under the CPI-X framework, the X factor measures the real rate of change in annual expected revenue from one year to the next. A negative X factor represents a real increase in revenue. Conversely, a positive X factor represents a real decrease in revenue.
- (f) Murraylink is not required to apply an X factor for 2018–19 because we set the 2018–19 MAR in this decision. The MAR for 2018–19 is around 3.9 per cent higher than the approved MAR for 2017–18 in real terms, or 6.4 per cent higher in nominal terms.

This section summarises our final decision on key elements of the building blocks including:

- RAB (section 2.2)
- Forecast inflation (section 2.3)
- Rate of return (section 2.4)
- Depreciation allowance (section 2.5)
- Efficient level of capex (section 2.6)
- Efficient level of opex (section 2.7)
- Forecast level of corporate income tax (section 2.8).

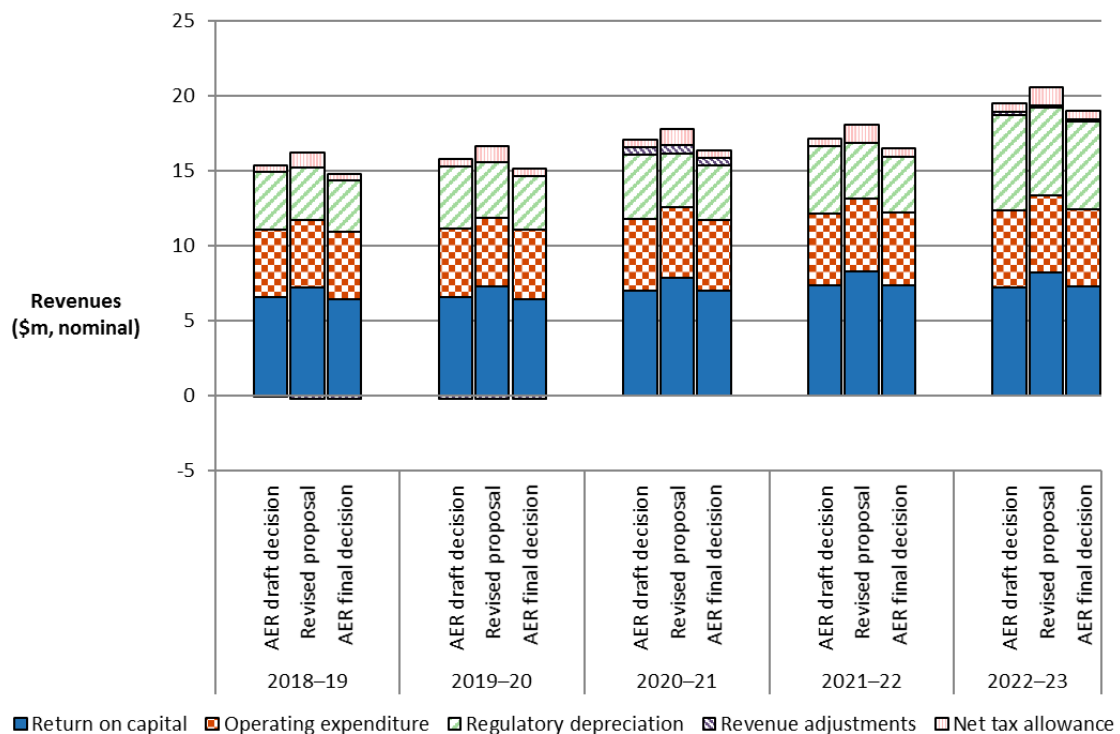
Incentive schemes including the EBSS, CESS and STPIS are covered in section 3.

The other components of our determination including the pricing methodology, cost pass throughs and negotiating framework are covered in section 4.

2.1 Key differences between our draft and final decisions

Our final decision allows Murraylink to recover 3.9 per cent less revenue from its customers than our draft decision of \$84.6 million (\$nominal). Figure 2.3 shows the building block components from our final determination that make up the annual building block revenue requirement for Murraylink, and the corresponding components from its revised proposal and our draft decision.

Figure 2.3 Murraylink annual building block revenue requirement (\$million, nominal)



Source: AER analysis

Figure 2.3 shows that the main factor driving the decrease in revenue between our draft and final decisions is the regulatory depreciation. Our final decision includes a regulatory depreciation of \$20.2 million (\$nominal) which is \$2.9 million lower than our draft decision.¹⁶

We applied a rate of return of 5.7 per cent in our draft decision and 5.69 in our final decision. Whilst Murraylink accepted our draft decision on the return on debt, its revised proposal presented a return on equity which we have not accepted in our final decision. This is discussed further in section 2.4.

¹⁶ The decrease to the regulatory depreciation allowance from the draft decision reflects a lower opening RAB as at 1 July 2018 in our final decision.

On forecast capex, the main difference between our draft and final decisions is due to our acceptance of Murraylink's forecast capex (in its revised proposal) for its control system upgrade. This is discussed in section 2.6.

2.2 Regulatory asset base

Our revenue determination includes Murraylink's opening regulatory asset base (RAB) value as at 1 July 2018 and projected RAB value for the 2018–23 regulatory control period.¹⁷ Our final decision is to determine an opening RAB value of \$112.8 million (\$nominal) as at 1 July 2018 for Murraylink.

We determine a forecast closing RAB value at 30 June 2023 of \$123.7 million (\$nominal). Our final decision on the forecast closing RAB reflects our minor changes to the opening RAB as at 1 July 2018 and our final decisions on the expected inflation rate, forecast capex and forecast depreciation.

Table 2.2 sets out our final decision on the forecast RAB values for Murraylink over the 2018–23 regulatory control period.

Table 2.2 AER's final decision on Murraylink's RAB for the 2018–23 period (\$million, nominal)

	2018–19	2019–20	2020–21	2021–22	2022–23
Opening RAB	112.8	113.8	123.0	129.9	128.6
Capital expenditure ^a	4.5	12.8	10.6	2.4	0.9
Inflation indexation on opening RAB	2.8	2.8	3.0	3.2	3.2
Less: straight-line depreciation ^b	6.2	6.4	6.6	6.9	9.0
Closing RAB	113.8	123.0	129.9	128.6	123.7

Source: AER analysis.

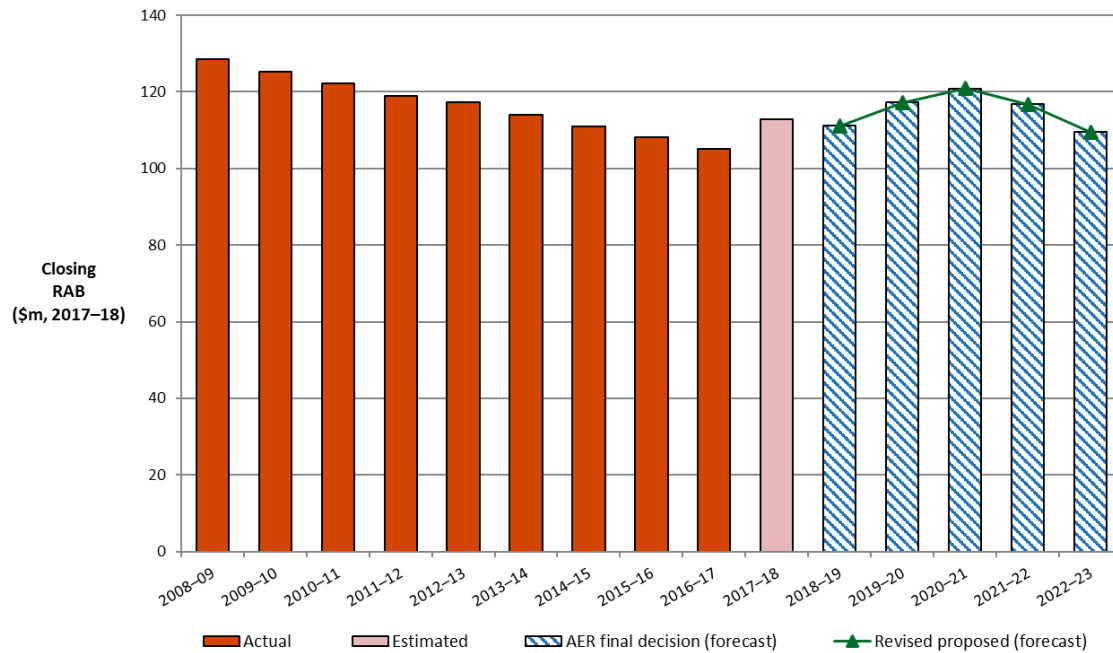
- (a) As incurred and net of forecast disposals. In accordance with the timing assumptions of the post-tax revenue model (PTRM), the capex includes a half-WACC allowance to compensate for the six-month period before capex is added to the RAB for revenue modelling.
- (b) Based on as-commissioned capex.

Figure 2.4 compares our final decision on Murraylink's forecast RAB to Murraylink's revised proposal and actual RAB in real dollar terms (\$2017–18). The RAB is expected to initially increase then decline over the 2018–23 regulatory control period. It should be noted that there is the potential for Murraylink's RAB to increase further in the 2018–23 regulatory control period. This may happen if Murraylink's proposed contingent project proceeds in the 2018–23 regulatory control period. We consider Murraylink's proposed contingent project in section 2.6.

¹⁷ NER, cl. 6A.4.2 (3A) and (4)

Further detail on our final decision on Murraylink's RAB is set out in attachment 2.

Figure 2.4 Murraylink's actual RAB, revised proposal forecast RAB and AER final decision forecast RAB (\$million, 2017–18)



Source: AER analysis.

2.3 Forecast inflation

Forecast inflation affects almost every component of our revenue determination for Murraylink. However, the most significant impact is on our depreciation allowance. Given that we apply a nominal rate of return, and also annually index the RAB, we make a negative adjustment to our depreciation building block to avoid double counting inflation. If the estimate of expected inflation is not accurate, the result will be a potential under-recovery of costs (if the forecast of inflation is too high) or an over-recovery (if the forecast is too low).

The regulatory treatment of inflation was considered through a separate consultation process during the course of making our draft decision and the submission of Murraylink's revised proposal. In our draft decision, we did not accept Murraylink's market-based inflation forecast approach.¹⁸ We adopted our current approach¹⁹ pending the outcome of the inflation review. This review of inflation concluded on 20

¹⁸ AER, *Draft Decision: Murraylink transmission determination 2018 to 2023, Attachment 3 - Rate of return*, September 2017, pp. 3-142 to 3-144.

¹⁹ We use the Reserve Bank of Australia's (RBA's) two year forecast of inflation (which is as far as the RBA forecasts) and combines these two values with the midpoint of the RBA's target band for inflation (currently 2.5 per cent) to extend the series out to ten years.

December 2017 after Murraylink submitted its revised proposal. Our final position in that review was that we will continue our current approach to the regulatory treatment of inflation in our determination of revenues and prices for electricity and gas network services.²⁰

2.4 Rate of return (return on capital) and value of imputation credits (gamma)

The allowed rate of return provides a service provider a return on capital to service the interest on its loans and give a return on equity to investors.²¹ The return on capital building block is calculated as a product of the rate of return and the value of the RAB.

Our final decision is to reject Murraylink's revised rate of return proposal²² and determine an allowed rate of return of 5.69 per cent (nominal vanilla).

We are satisfied that this rate of return achieves the allowed rate of return objective (ARORO).²³ That is, we are satisfied that this allowed rate of return is commensurate with the efficient financing costs of a benchmark efficient entity with a similar degree of risk as that which applies to Murraylink in providing prescribed transmission services.²⁴

²⁰ AER, *Regulatory treatment of inflation, Final position*, December 2017, p. 7.

²¹ We are currently reviewing the rate of return guideline, and the AER has issued several discussion papers in this process. A draft decision is due in June 2018.

²² Murraylink, *Murraylink revised revenue proposal effective July 2018 to June 2023*, December 2017, p. 27.

²³ NER, cl. 6.5.2(b); cl. 6A.6.2(b); NGR, cl. 87(2).

²⁴ NER, cl. 6.5.2(c); cl. 6A.6.2(c); NGR, cl. 87(3).

This allowed rate of return will apply to Murraylink for 2018–19. A different rate of return will apply to Murraylink for the remaining regulatory years of the 2018–23 regulatory control period. This is because we will update the return on debt component of the rate of return each year to partially reflect prevailing debt market conditions in each year. We discuss this annual update in attachment 3.

The rate of return in our final decision and Murraylink's proposed rate of return are set out in Table 2.3.

Table 2.3 Final decision on Murraylink's rate of return (% nominal) and value of imputation credits

	Previous allowed return (2013–18)	Murraylink's revised proposal (2018–23)	AER final decision (2018–19)	Allowed return over 2018–23 regulatory control period
Return on equity (nominal post-tax)	8.72	8.9	7.4	Constant (%)
Return on debt (nominal pre-tax)	6.69	4.7	4.55	Updated annually
Gearing	60	60	60	Constant (60%)
Nominal vanilla WACC	7.5	6.4	5.69	Updated annually for return on debt
Forecast inflation	2.5	2.5	2.45	Constant (%)
Value of imputation credits (gamma)	0.25	0.40	0.40	Constant

Source: AER analysis; *Murraylink revised revenue proposal effective July 2018 to June 2023*, December 2017, pp. 18 and 27.

Our return on equity estimate is 7.4 per cent. This rate will apply to Murraylink in each regulatory year. Our return on equity point estimate and the parameter inputs alongside Murraylink's are set out in Table 2.4.

Table 2.4 Final decision on Murraylink's return on equity (nominal)

	AER previous decision (2013–18)	Murraylink's revised proposal (2018–23)	AER final decision (2018–23)
Nominal risk free rate (return on equity only)	3.52%	2.78% ^a	2.84% ^b
Equity risk premium	4.55%	6.16%	4.55%
MRP	6.5%	7.7%	6.50%
Equity beta	0.8	0.8	0.7
Nominal post-tax return on equity	8.72%	8.9%	7.4%

Source: AER analysis; Murraylink, *Murraylink revised revenue proposal effective July 2018 to June 2023*, December 2017, p. 27.

^a Based on Murraylink's indicative averaging period adopted for its revised proposal of 20 business days to 31 October 2017

^b Calculated with a final averaging period of 17 to 31 January 2018.

In its revised rate of return proposal, Murraylink adopted the Guideline approach to estimating the return on equity except for how it determined input values for two parameters. These two parameters are the MRP and equity beta. For reasons set out in attachment 3 to this final decision, we have not accepted Murraylink's estimate of the market risk premium and the equity beta.

Murraylink's revised proposal adopted our draft decision on estimating the return on debt.²⁵ Therefore, we accept Murraylink's revised proposal and the reasons are set out in attachment 3 to this final decision.

Murraylink's revised proposal also accepted our draft decision for the value of imputation credits (gamma).²⁶ Our draft decision did not accept Murraylink's proposed gamma of 0.25 and instead applied a value of 0.4.²⁷ Our final decision, consistent with our draft decision and Murraylink's revised proposal, is to apply a gamma of 0.4.

Further detail on our final decision regarding Murraylink's return on equity is set out in attachment 3.

2.5 Regulatory depreciation (return of capital)

Depreciation is the allowance provided so capital investors recover their investment over the economic life of the asset (return of capital). In deciding whether to approve the depreciation schedules submitted by Murraylink, we make determinations on the indexation of the RAB and depreciation building blocks for Murraylink's 2018–23 regulatory control period.²⁸ The regulatory depreciation allowance is the net total of the straight-line depreciation less the inflation indexation adjustment of the RAB.

Our final decision is to determine a regulatory depreciation allowance of \$20.2 million (\$nominal) for Murraylink over the 2018–23 regulatory control period. This amount represents a reduction of \$0.2 million (or 0.8 per cent) on the \$20.4 million (\$nominal) in Murraylink's revised proposal.²⁹ It represents a decrease of \$2.9 million (or 12.6 per cent) from the \$23.2 million (\$nominal) in our draft decision.

Table 2.5 sets out our final decision on Murraylink's depreciation allowance for the 2018–23 regulatory control period.

²⁵ Murraylink, *Murraylink revised revenue proposal effective July 2018 to June 2023*, December 2017, pp. 18–27.

²⁶ Murraylink, *Murraylink revised revenue proposal effective July 2018 to June 2023*, December 2017, p. 30.

²⁷ This is consistent with the approach we adopted in recent decisions, which has been upheld by the Federal Court of Australia; Federal Court of Australia, *Australian Energy Regulator v Australian Competition Tribunal (No 2) [2017] FCAFC 79*, May 2017, p. 216.

²⁸ NER, cl. 6.12.1(8).

²⁹ Murraylink, *Revised Revenue proposal 2018–23, attachment 8.1 - Murraylink - PTRM - 20171201 - Public*, December 2017.

Table 2.5 AER's final decision on Murraylink's forecast regulatory depreciation for the 2018–23 regulatory control period (\$million, nominal)

	2018–19	2019–20	2020–21	2021–22	2022–23	Total
Straight-line depreciation	6.2	6.4	6.6	6.9	9.0	35.1
Less: inflation indexation on opening RAB	2.8	2.8	3.0	3.2	3.2	14.9
Regulatory depreciation	3.4	3.6	3.6	3.7	5.8	20.2

Source: AER analysis.

Further detail on our final decision regarding depreciation is set out in attachment 5.

2.6 Capital expenditure

We are satisfied that Murraylink's revised proposed total forecast capex of \$28.96 million (\$2017–18) for the 2018–23 regulatory control period reasonably reflects the criteria set out under the NER for accepting forecast capex and is efficient. Our alternative estimate of the total forecast capex that we consider reasonably reflects the capex criteria is \$28.72 million. On the basis that we consider this difference (\$0.24 million) is not material, we accept Murraylink's revised capex forecast.

Table 2.6 sets out our final decision on Murraylink's capex.

Table 2.6 AER final decision on Murraylink's total forecast capex for the 2018–23 period (\$million, 2017–18)

	2018–19	2019–20	2020–21	2021–22	2022–23	Total
Murraylink initial proposal	5.78	13.85	10.84	2.39	0.97	33.83
AER draft decision	4.03	11.10	8.78	1.96	0.76	26.63
Murraylink revised proposal	4.35	11.99	9.67	2.15	0.80	28.96
AER final decision	4.35	11.99	9.67	2.15	0.80	28.96

Source: Murraylink, *Regulatory proposal*; 31 January 2017, p. 93; Murraylink, *Revised regulatory proposal*; 1 December 2017, p. 45; AER analysis.

Note: Numbers may not add up due to rounding.

Our alternative estimate includes Murraylink's revised forecast of \$25.3 million for its control system upgrade. Our draft decision adopted a lower amount for the control system upgrade on the basis that it included a margin (the margin represents a management fee paid by the asset owner Murraylink Transmission Company to APA

for operating the interconnector).³⁰ We are satisfied that this forecast reasonably reflects the capex criteria. In coming to this conclusion, we consider that Murraylink has demonstrated that:

- It does not 'double dip' on the recovery of the margin as we raised in our draft decision.
- The margin as applied in the contract is in line with margins earned by other contractors in the industry.
- The entire contract cost is likely the lowest cost scenario available.

Murraylink's revised proposal also included a capex amount of \$240,000 for 'consumer engagement and revenue determination costs'. We do not accepted this proposed capex amount. However, as Murraylink's total forecast capex in its revised proposal is not materially different to our alternative estimate of total forecast capex, we have approved Murraylink's total forecast capex.

Contingent project

Murraylink proposed a \$994 million contingent project to upgrade the Murraylink interconnector to address constraints in the regional transmission networks and enhance South Australia's interconnection capacity. In our draft decision, we did not accept Murraylink's proposed trigger events. We considered that joint transmission planning obligations under the NER are essential to this contingent project. We determined that, for us to be satisfied that this project should be a contingent project, Murraylink should amend its trigger events to the following:

1. Successful completion of a RIT-T (including comprehensive assessment of credible options), and all joint planning obligations under the NER, demonstrating that the establishment of a new or upgraded high-voltage interconnection is the option that maximises the positive net economic benefits.
2. A determination by the AER that the proposed investment satisfies the regulatory investment test for transmission; and
3. Murraylink Board commitment to proceed with the project subject to the AER amending Murraylink's revenue determination pursuant to the Rules.

Murraylink accepted our changes to the trigger events for its contingent project.

The forecast expenditure for the contingent project does not form part of our assessment of the total forecast capex that we approve in this determination. If, during the regulatory control period, Murraylink submits a contingent project application that the trigger events have occurred, we will assess the efficiency of the proposed capex and opex. The revenue that Murraylink can recover from its customers may be higher than what is set out in this determination.

³⁰ Murraylink's revised forecast of \$25.25 million is \$2.54 million higher than our draft decision.

Further detail on our final decision regarding Murraylink's forecast capex and the contingent project is set out in attachment 6.

2.7 Operating expenditure

Our final decision is to accept Murraylink's total opex forecast of \$22.1 million (\$2017–18) as set out in Table 2.7.

Table 2.7 AER final decision on forecast opex (\$million, 2017–18)

	2018–19	2019–20	2020–21	2021–22	2022–23	Total
Total opex, excluding debt raising costs and connection charges	3.38	3.35	3.40	3.35	3.53	17.01
Connection charges	1.01	1.01	1.01	1.01	1.01	5.06
Debt raising costs	0.01	0.01	0.01	0.01	0.01	0.03
Total opex	4.39	4.37	4.42	4.37	4.54	22.11

Source: Murraylink, *Revised regulatory proposal PTRM*, 1 December 2017; AER analysis.

Note: Numbers may not add up due to rounding.

Consistent with our draft decision, we are satisfied that Murraylink's opex forecast of \$22.1 million (\$2017–18) reasonably reflects the criteria set out under the NER for accepting forecast opex and is efficient. In our draft decision we accepted the opex forecast in Murraylink's initial proposal, which it has not changed in its revised proposal.³¹

We note that Murraylink revised the actual opex for 2013–16 that it previously reported in its regulatory accounts.³² This includes the amount we had used as base opex to develop the alternative estimate of opex in our draft decision. Given this, we have updated our alternative estimate of total opex to ensure we remain satisfied that Murraylink's opex forecast reasonably reflects the opex criteria. Specifically, we have updated:

- actual opex for the base year (2015–16) to reflect the amount in Murraylink's revised EBSS model
- inflation numbers to reflect the Reserve Bank of Australia's latest *Statement on monetary policy*³³
- our overall rate of change to reflect the input price weights as set out in our 2017 benchmarking report,³⁴ applying the most recent labour price forecast by Deloitte Access Economics (DAE).³⁵

³¹ Murraylink, *Revised revenue proposal 2018–23*, 1 December 2017, p. 32.

³² Murraylink, *Revised revenue proposal 2018–23*, December 2017, pp. 11–12;

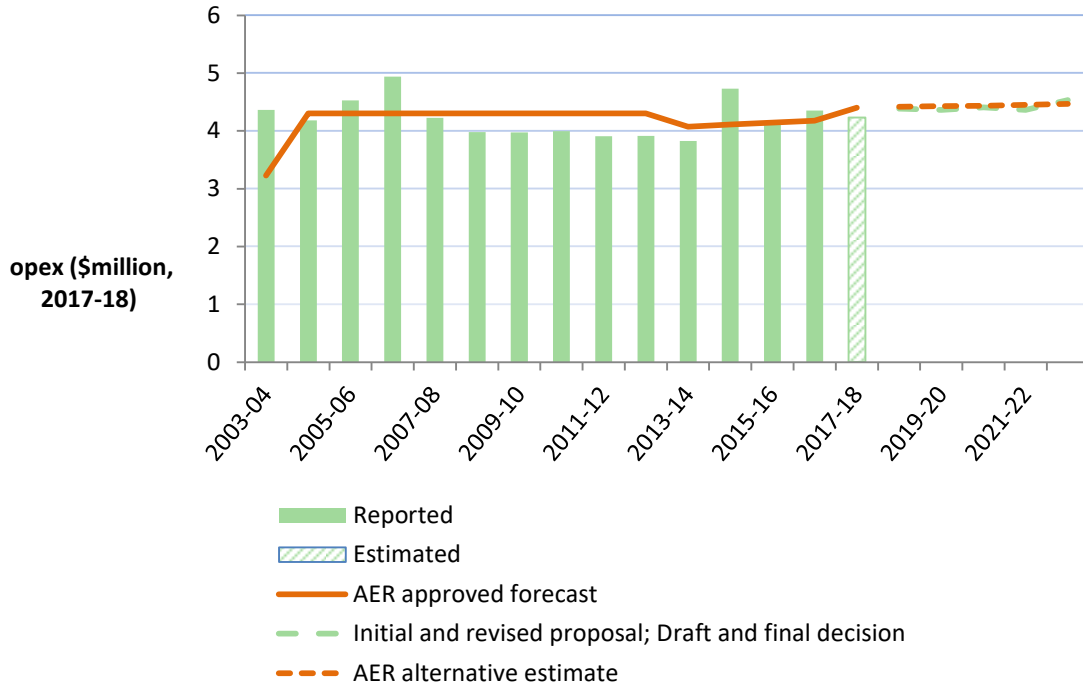
Murraylink, *Response to AER information request IR#011 - EBSS*, 12 February 2018, p. 2.

³³ Reserve Bank of Australia, *Statement on Monetary Policy*, February 2018.

The difference between our revised estimate of \$22.8 million (\$2017–18) and Murraylink’s proposal is not material.

We have compared Murraylink’s forecast opex with its historical opex, historical allowance, our draft decision and our alternative opex forecast in Figure 2.5.

Figure 2.5 Murraylink's actual and forecast opex (\$million, 2017–18)



Source: Murraylink, *Regulatory accounts 2003–04 to 2015–16*; Murraylink, *Revenue proposal, PTRM*, 31 January 2017; Murraylink, *Revised revenue proposal, PTRM*, 1 December 2017; AER, *Final decision PTRM*, April 2013; AER, *PTRM model_MTC_decision_correction*, April 2004; AER analysis.

Note: Includes debt raising costs and connection charges.

We received one submission from the CCP on Murraylink’s opex proposal.³⁶ While the CCP supported our draft decision approach, it submitted that we should update our assessment using audited data for 2016–17 and review our rate of price growth, in particular, our forecast of labour costs.³⁷ As stated above, we have updated our alternative estimate to reflect new information and we remain satisfied that Murraylink’s proposed total opex reasonably reflects the opex criteria.³⁸

³⁴ Economic Insights, *Economic Benchmarking Results for the Australian Energy Regulator’s 2017 TNSP Benchmarking Report*, 6 November 2017, pp. 6-7.

³⁵ Deloitte Access Economics, *Labour Price Forecasts: Prepared for the Australian Energy Regulator*, February 2018, p. xiv.

³⁶ Consumer Challenge Panel (subpanel 9), *Submission on Murraylink’s revised proposal*, 31 January 2018, p. 4.

³⁷ Consumer Challenge Panel (subpanel 9), *Submission on Murraylink’s revised proposal*, 31 January 2018, p. 4.

³⁸ NER, cl 6A.6.6(c).

Our opex model, which we used to calculate our alternative estimate of efficient opex for Murraylink, is available on our website.

2.8 Corporate income tax

Our revenue determination includes the estimated cost of corporate income tax for Murraylink's 2018–23 regulatory control period.³⁹ This allows Murraylink to recover the estimated costs associated with the corporate income tax payable during the 2018–23 period.

Our final decision on the estimated cost of corporate income tax is \$2.5 million (\$nominal) for Murraylink over the 2018–23 regulatory control period. This amount represents a decrease of \$3.2 million (or 56 per cent) from the \$5.7 million (\$nominal) in Murraylink's revised proposal. Our final decision represents a slight increase in the estimated cost of corporate income tax in our draft decision. The decrease from the revised proposal reflects our adjustment on the return on capital (sections 2.2 and 2.3) building block, which affects revenues, and in turn impacts the tax calculation.

Table 2.8 shows our final decision on the estimated cost of corporate income tax allowance for Murraylink over the 2018–23 regulatory control period.

Table 2.8 AER's final decision on Murraylink's cost of corporate income tax allowance over the 2018–23 regulatory control period (\$million, nominal)

	2018–19	2019–20	2020–21	2021–22	2022–23	Total
Tax payable	0.7	0.7	0.8	0.9	1.0	4.2
Less: value of imputation credits	0.3	0.3	0.3	0.4	0.4	1.7
Net corporate income tax allowance	0.4	0.4	0.5	0.5	0.6	2.5

Source: AER analysis.

Further detail on our final decision regarding Murraylink's corporate income tax allowance is set out in attachment 8.

³⁹ NER, cl. 6A.6.4.

3 Incentive schemes

Incentive schemes are a component of incentive-based regulation and complement our approach to assessing efficient costs. The incentive schemes that will apply to Murraylink are:

- the efficiency benefit sharing scheme (EBSS)
- the capital expenditure sharing scheme (CESS)
- the service target performance incentive scheme (STPIS).

Our incentive schemes work together to encourage network businesses to make efficient decisions. They give network businesses an incentive to pursue efficiency improvements in opex and capex, and to share them with consumers. Incentives for opex and capex are balanced with the incentives under our STPIS. The incentive schemes encourage businesses to make efficient decisions on when and what type of expenditure to incur, and meet service reliability targets. Ultimately, the intention of our incentive schemes is to provide customers with better value for money through either improving network performance or lowering electricity bills.

3.1 Efficiency benefit sharing scheme (EBSS)

The EBSS provides a constant incentive for service providers to pursue efficiency improvements in opex. Without the EBSS, a network may have a greater incentive to reduce costs in a particular year in a regulatory control period.

Incentive based regulation encourages networks to provide services as efficiently as possible while fulfilling their reliability and security obligations. With MAR locked in at the beginning of the regulatory period networks are incentivised to provide services at lowest possible cost because their returns are based on their actual costs. If the network can reduce its cost to below what we have estimated to be efficient, then it can retain the savings during the regulatory period. Those efficiency savings are then passed on to consumers through lower opex forecasts in the following period. The EBSS ensures that the benefit of opex efficiencies to both networks and consumers is the same regardless of when the network makes those savings within the regulatory period.

Our final decision is to accept Murraylink's proposal, which we have updated for inflation. We accept EBSS carryover amounts totalling \$0.2 million (\$2017–18) from the application of the EBSS in the 2013–18 regulatory control period. This is less than our draft decision carryover amounts of \$0.4 million (\$2017–18) because Murraylink updated its historical operating expenditure.⁴⁰ We discuss our reasons further in the next section.

⁴⁰ Murraylink, *Revised revenue proposal*, December 2017, pp. 11–12.

Table 3.1 sets out our final decision on the EBSS carryover amounts Murraylink accrued during the 2013–18 regulatory control period.

Table 3.1 AER’s final decision on Murraylink's EBSS carryover amounts (\$million, 2017–18)

	2018–19	2019–20	2020–21	2021–22	2022–23	Total
Murraylink proposal	-0.16	-0.17	0.52	–	0.52	0.71
AER draft decision	-0.02	-0.22	0.48	–	0.16	0.41
Murraylink revised proposal and AER final decision	-0.19	-0.22	0.48	–	0.10	0.18

Source: Murraylink, *Revenue proposal, PTRM*, January 2017; Murraylink, *Revised revenue proposal, PTRM*, December 2017; AER analysis.

Note: Numbers may not add up due to rounding.

Consistent with our draft decision, we will apply Version 2 of the EBSS to Murraylink in the 2018–23 regulatory control period.⁴¹ We will only exclude debt raising costs from the scheme.

Table 3.2 sets out the opex forecasts we will use to calculate efficiency gains in the 2018–23 regulatory control period, subject to further adjustments permitted by the EBSS.

Table 3.2 Forecast total opex for the EBSS (\$million, 2017–18)

	2015–16	2016–17	2017–18	2018–19	2019–20	2020–21	2021–22	2022–23
Total opex	4.20	4.23	4.46	4.39	4.37	4.42	4.37	4.54
Less debt raising costs	-0.07	-0.07	-0.07	-0.01	-0.01	-0.01	-0.01	-0.01
Target opex for the EBSS	4.13	4.16	4.39	4.39	4.37	4.41	4.37	4.54

Source: Murraylink, *Revised revenue proposal, PTRM*, December 2017; AER analysis.

Note: Numbers may not add up due to rounding.

Murraylink updated its historical operating expenditure

Historical actual opex numbers are key inputs that we use to calculate EBSS carryover amounts. Network service providers are required to provide their regulatory accounts to us annually. These accounts include actual opex amounts. In our draft decision, we used the actual opex amounts Murraylink reported in its 2013–16 regulatory

⁴¹ AER, *Draft decision, Murraylink transmission determination 2018–23, Attachment 9 – Efficiency Benefit Sharing Scheme*, September 2017, p. 9–7.

accounts.⁴²

In its revised proposal, Murraylink did not agree with our draft decision. It stated that the 2014–16 regulatory accounts it provided to us, which we relied upon, do not accurately reflect its operating expenses.⁴³ In 2014–15, Murraylink changed how it reported operating expenses for financial accounting purposes but it did not initially make the same change in its regulatory accounts.⁴⁴ Murraylink advised that it reflected the changes in its 2016–17 regulatory accounts, which also include updated historical actual opex for 2014–16.⁴⁵

We have reviewed Murraylink's regulatory accounts, including the updated historical actual opex amounts. However, we were unable to reconcile the amounts from the regulatory accounts with those Murraylink reported in its revised EBSS model.⁴⁶ Murraylink clarified the discrepancy by stating that its 2013–14 regulatory accounts and revised 2015–16 regulatory accounts contained further errors.⁴⁷ Murraylink recommended that we rely on the historical actual opex amounts reported in its revised EBSS model because they are the most accurate representation of its historic opex.⁴⁸

We are satisfied that the historical actual opex amounts reported in Murraylink's revised EBSS model are the most accurate historic opex available and we have updated our EBSS carryover calculations accordingly.

3.2 Capital expenditure sharing scheme (CESS)

The CESS provides an incentive for service providers to pursue efficiency improvements in capex. Similar to the EBSS, the CESS provides a network service provider with the same reward for an efficiency saving and the same penalty for an efficiency loss regardless of which year they make the saving or loss.

Under the CESS a service provider retains 30 per cent of the benefit or cost of an underspend or overspend, while consumers retain 70 per cent of the benefit or cost of an underspend or overspend. This means that for a one dollar saving in capex the service provider keeps 30 cents of the benefit while consumers keep 70 cents of the benefit. Conversely, in the case of an overspend, the service provider pays for 30 cents of the cost while consumers bear 70 cents of the cost.

Our final decision is to apply Version 1 of our CESS as set out in our capex incentive guideline to the 2018–23 regulatory control period, consistent with our framework and

⁴² AER, *Draft decision, Murraylink transmission determination 2018–23, Attachment 9 – Efficiency Benefit Sharing Scheme*, September 2017, pp. 9–6 to 9–7.

⁴³ Murraylink, *Revised revenue proposal*, December 2017, pp. 11–12.

⁴⁴ Murraylink, *Revised revenue proposal*, December 2017, pp. 11–12.

⁴⁵ Murraylink, *Revised revenue proposal*, December 2017, pp. 11–12.

⁴⁶ AER, *Information request to Murraylink IR#011 – EBSS*, 29 January 2018.

⁴⁷ Murraylink, *Response to AER information request IR#011 – EBSS*, 12 February 2018.

⁴⁸ Murraylink, *Response to AER information request IR#011 – EBSS*, 12 February 2018.

approach paper.⁴⁹ This is the first time that the CESS will be applied to Murraylink following the making of our capex incentive guideline. This is to balance the incentives for Murraylink to pursue opex efficiencies with its incentives to pursue capex efficiencies. The CESS provides an incentive for service providers to pursue efficiency improvements in capex. Similar to the EBSS, the CESS provides a network service provider with the same reward for an efficiency saving and the same penalty for an efficiency loss regardless of which year they make the saving or loss. Under the application of the CESS and EBSS, incentives for opex and capex are balanced (30 per cent) and constant.

3.3 Service target performance incentive scheme (STPIS)

The STPIS is intended to balance a business's incentive to reduce expenditure with the need to maintain or improve service quality. In simple terms, it penalises networks for cutting costs at the expense of the reliability of their network. It achieves this by providing financial incentives to businesses to maintain and improve service performance where customers are willing to pay for these improvements.

Businesses can only retain their rewards for sustained and continuous improvements to the reliability of supply for customers. Once improvements are made, the benchmark performance targets will be tightened in future years.

Murraylink accepted our draft decision on the application of STPIS. Our final decision is to apply all components of Version 5 of the STPIS to Murraylink for the 2018–23 regulatory control period. Under this version of the scheme, the network capability component does not apply to Murraylink.⁵⁰ We have also updated Murraylink's performance targets to include its latest audited performance data for 2017 for this final decision.

The STPIS parameters for our final decision are set out in section 1.6 of the transmission determination.

⁴⁹ AER, *Final framework and approach for Murraylink transmission determination 2018-23*, April 2015, p. 23.

⁵⁰ AER, *Final – Service Target Performance Incentive Scheme*, October 2015, cl. 2.2(d).

4 Price terms and conditions

In this section, we consider the other aspects of our determination. These may be described as the terms and conditions of our determination that cover how Murraylink must set its prices, the framework for Murraylink's negotiated services and the conditions under which we may grant Murraylink additional revenues to cover unforeseen circumstances.

4.1 Pricing methodology

The role of Murraylink's pricing methodology is to answer the question 'who should pay how much'⁵¹ in order for Murraylink to recover its costs. The pricing methodology must provide a 'formula, process or approach'⁵² that when applied:

- allocates the aggregate annual revenue requirement to the categories of prescribed transmission services that a transmission business provides and to the connection points of network users⁵³
- determines the structure of prices that a transmission business may charge for each category of prescribed transmission services.⁵⁴

In our draft decision, we approved Murraylink's proposed pricing methodology for the 2018–23 regulatory control period. Murraylink's revised proposal accepted our draft decision, and our final decision is to approve Murraylink's pricing methodology. Murraylink's pricing methodology relates to prescribed transmission services only.

The pricing methodology that will apply to Murraylink for the period of this determination is set out in Attachment B of our transmission determination.

4.2 Cost pass through

In our draft decision, we approved Murraylink's nominated pass through events.⁵⁵ Murraylink's revised proposal accepted our draft decision.⁵⁶

Our final decision is to approve Murraylink's nominated pass through events and associated definitions. These will apply to Murraylink throughout the regulatory control period in addition to the pass through events which are prescribed by the NER.

⁵¹ AEMC, *Rule determination: National Electricity Amendment (Pricing of Prescribed Transmission Services) Rule 2006 No. 22*, 21 December 2006, p. 1.

⁵² NER, cl. 6A.24.1(b).

⁵³ NER, cl. 6A.24.1(b)(1).

⁵⁴ NER, cl. 6A.24.1(b)(2).

⁵⁵ AER, *Draft Decision Murraylink transmission determination 2018 to 2023 – Attachment 13 Pass through events*, September 2017.

⁵⁶ Murraylink. *Revised Revenue Proposal effective July 2018 to June 2023*, 1 December 2017, p. 54.

4.3 Negotiating framework

In our draft decision, we approved Murraylink’s proposed negotiating framework for the 2018–23 regulatory control period.⁵⁷

Our final decision is to approve Murraylink’s negotiating framework, subject to the new rules (as explained below).

Under the NER, a transmission determination includes a determination in relation to the TNSP’s negotiating framework.⁵⁸ The negotiating framework determination must also specify the negotiated transmission service criteria (NTSC) that form part of a transmission determination.⁵⁹

In May 2017, the AEMC made a rule change to amend those aspects of the NER relating to the arrangements for transmission connections.⁶⁰ The rule change removes the requirement, on and from 1 July 2018, for TNSPs to develop individual negotiating frameworks for approval by the AER and for the AER to specify the NTSC that apply to TNSPs. Instead, the rule change elevates what is in the existing approved negotiating frameworks and NTSC into the NER, and expands the existing negotiating principles in the NER.⁶¹

As a result of the AEMC’s rule change, all negotiating framework determinations the AER has made prior to 1 July 2018 will cease to apply. After this date, any parties seeking connection to the transmission network will do so under the new rules.

Given that our final transmission determination for Murraylink is to be made by 30 April 2018 which is before the 1 July 2018 commencement date, we will still need to comply with our obligations under the NER and include a negotiating framework determination in Murraylink’s final transmission determination. However, in light of the AEMC final rule, this negotiating framework determination will cease to apply from 1 July 2018.

Attachment A of our transmission determination sets out our approved negotiating framework for Murraylink.

⁵⁷ Murraylink currently provides prescribed transmission services only, and does not provide any negotiated or unregulated services. Regardless, Murraylink proposed a negotiating framework as required under current rules.

⁵⁸ NER, cl. 6A.2.2(3).

⁵⁹ NER, cl. 6A.9.4.

⁶⁰ AEMC, *National Electricity Amendment (Transmission Connection and Planning Arrangements) Rule 2017 No. 4*, 23 May 2017. In addition to transmission connections, the rule change also relates to transmission planning.

⁶¹ AEMC, *Rule Determination, National Electricity Amendment (Transmission Connection and Planning Arrangements) Rule 2017*, p. 66.

5 Understanding the NEO

The NEL requires us to make our decision in a manner that contributes, or is likely to contribute, to achieving the NEO.⁶² The focus of the NEO is on promoting efficient investment in, and operation and use of, electricity services (rather than assets) in the long term interests of consumers.⁶³ This is not delivered by any one of the NEO's factors in isolation, but rather by balancing them in reaching a regulatory decision.⁶⁴

In general, we consider that the long-term interests of consumers are best served where consumers receive a reasonable level of safe and reliable service that they value at least cost in the long run.⁶⁵ A decision that places too much emphasis on short term considerations may not lead to the best overall outcomes for consumers once the longer term implications of that decision are taken into account.⁶⁶

There may be a range of economically efficient decisions that we could make in a revenue determination, each with different implications for the long term interests of consumers.⁶⁷ A particular economically efficient outcome may nevertheless not be in the long term interests of consumers, depending on how prices are structured and risks allocated within the market.⁶⁸ There are also a range of outcomes that are unlikely to advance the NEO, or advance the NEO to the degree that others would. For example, we consider that:

- the long term interests of consumers would not be advanced if we encourage overinvestment which results in prices so high that consumers are unwilling or unable to efficiently use the network.⁶⁹ This could have significant longer term pricing implications for those consumers who continue to use network services
- equally, the long-term interests of consumers would not be advanced if allowed revenues result in prices so low that investors do not invest to sufficiently maintain the appropriate quality and level of service, and where customers are making more use of the network than is sustainable.⁷⁰ This could create longer term problems in the network, and could have adverse consequences for safety, security and reliability of the network

⁶² NEL, section 16(1).

⁶³ This is also the view of the Australian Energy Markets Commission (AEMC). See, for example, AEMC, *Applying the Energy Objectives: A guide for stakeholders*, 1 December 2016, p. 5.

⁶⁴ Hansard, SA House of Assembly, 26 September 2013, p. 7173. See also the AEMC, *Applying the Energy Objectives: A guide for stakeholders*, 1 December 2016, pp. 7–8.

⁶⁵ Hansard, SA House of Assembly, 9 February 2005, p. 1452.

⁶⁶ See, for example, AEMC, *Applying the Energy Objectives: A guide for stakeholders*, 1 December 2016, pp. 6–7.

⁶⁷ Re Michael: Ex parte Epic Energy [2002] WASCA 231 at [143].

⁶⁸ See, for example, AEMC, *Applying the Energy Objectives: A guide for stakeholders*, 1 December 2016, p. 5.

⁶⁹ NEL, s. 7A(7).

⁷⁰ NEL, s. 7A(6).

The legislative framework recognises the complexity of this task by providing us with significant discretion in many aspects of the decision-making process to make judgements on these matters.

5.1 Achieving the NEO to the greatest degree

Electricity transmission determinations are complex decisions. In most cases, the provisions of the NER do not point to a single answer, either for our decision as a whole or in respect of particular components. They require us to exercise our regulatory judgement. For example, chapter 6A of the NER requires us to prepare forecasts, which are predictions about unknown future circumstances. Very often, there will be more than one plausible forecast,⁷¹ and much debate amongst stakeholders about relevant costs. For certain components of our decision there may therefore be several plausible answers or several plausible point estimates.

When the constituent components of our decision are considered together, this means there will almost always be several potential, overall decisions. More than one of these may contribute to the achievement of the NEO. In these cases, our role is to make an overall decision that we are satisfied contributes to the achievement of the NEO to the greatest degree.⁷²

We approach this from a practical perspective, accepting that it is not possible to consider every permutation specifically. Where there are choices to be made among several plausible alternatives, we have selected what we are satisfied would result in an overall decision that contributes to the achievement of the NEO to the greatest degree.

5.2 Interrelationships between constituent components

Examining constituent components in isolation ignores the importance of the interrelationships between components of the overall decision, and would not contribute to the achievement of the NEO. We have considered these interrelationships in our analysis of the constituent components of our final decision in the relevant attachments. Examples include:

- underlying drivers and context which are likely to affect many constituent components of our decision. For example, forecast demand affects the efficient levels of capex and opex in the regulatory control period.
- direct mathematical links between different components of a decision. For example, the level of gamma has an impact on the appropriate tax allowance; the benchmark

⁷¹ AEMC, *Rule Determination: National Electricity Amendment (Economic Regulation of Transmission Services) Rule 2006*, 16 November 2006, p. 52.

⁷² NEL, s. 16(1)(d).

efficient entity's debt to equity ratio has a direct effect on the cost of equity, the cost of debt, and the overall vanilla rate of return.

- trade-offs between different components of revenue. For example, undertaking a particular capex project may affect the need for opex or vice versa.

A Constituent components

This overview, together with its attachments, constitutes our final decision on Murraylink's revised revenue proposal. Our final decision on Murraylink's transmission determination includes the following constituent components:⁷³

Constituent component

In accordance with clause 6A.14.1(1)(i) of the NER, the AER does not approve the total revenue cap set out in Murraylink's revised building block proposal. Our final decision on Murraylink's total revenue cap is \$81.4 million (\$nominal) for the 2018–23 regulatory control period. This decision is discussed in Attachment 1 of this final decision.

In accordance with clause 6A.14.1(1)(ii) of the NER, the AER does not 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 2018–23 regulatory control period is set out in Attachment 1 of this final decision.

In accordance with clause 6A.14.1(1)(iii) of the NER, the AER has decided to apply the service component, network capability component and market impact component of Version 5 of the service target performance incentive scheme (STPIS) to Murraylink for the 2018–23 regulatory control period. The values and parameters of the STPIS are set out in section 1.6 of the transmission determination.

In accordance with clause 6A.14.1(1)(iv) of the NER, the AER's 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 2018–23 regulatory control period are set out in section 3.1 of this overview.

In accordance with clause 6A.14.1(1)(v) of the NER, the AER has approved 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 2018 and the length of this period is five years, expiring on 30 June 2023.

In accordance with clause 6A.14.1(2) and acting in accordance with clause 6A.6.7(d) of the NER, the AER has accepted Murraylink's revised total forecast capital expenditure of \$28.96 million (\$2017–18). This is discussed in attachment 6 of this final decision.

In accordance with clause 6A.14.1(3) and acting in accordance with clause 6A.6.6(d) of the NER, the AER has accepted Murraylink's revised total forecast operating expenditure inclusive of debt raising costs of \$22.1 million (\$2017–18). This is discussed in section 2.7 of this overview.

In accordance with clause 6A.14.1(4)(i), the AER has determined that Murraylink's proposed project (in three stages) is a contingent project for the purpose of the revenue determination. This is discussed in section 2.6 of this overview and attachment 6 of our final decision.

In accordance with clause 6A.14.1(4)(ii), the AER is satisfied that the capital expenditure for the contingent project as described in Murraylink's regulatory proposal reasonably reflects the capital expenditure criteria, taking into account the capital expenditure factors. This is discussed in attachment 6 of our final decision.

In accordance with clause 6A.14.1(4)(iii), the AER has determined that the triggers for Murraylink's contingent project are consistent with the NER.

Our final decision includes revised triggers to provide greater certainty as to our approach should Murraylink seek to act on its contingent project.

In accordance with clause 6A.14.1(5A) of the NER, the AER has determined 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 2018–23 regulatory control period. This is set out in section 3.2 of this overview.

⁷³ NER, cl. 6A.14.

Constituent component

In accordance with clause 6A.14.1(5B) and 6A.6.2 of the NER, the AER has decided that the allowed rate of return for the 2018–19 regulatory year is 5.69 per cent (nominal vanilla), as set out in attachment 3 of this final decision. The rate of return for the remaining regulatory years 2019–20 to 2022–23 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. This is set out in attachment 3 of our final decision.

In accordance with clause 6A.14.1(5C) of the NER, the AER has decided that the return on debt is to be estimated using a methodology referred to in clause 6A.6.2(i)(2), and using the formula to be applied in accordance with clause 6A.6.2(l). The methodology and formula are set out in attachment 3 of our final decision.

In accordance with clause 6A.14.1(5D) of the NER, the AER has decided that the value of imputation credits as referred to in clause 6A.6.4 is 0.4. This is set out in section 2.4 of this overview.

In accordance with clause 6A.14.1(5E) of the NER the AER has decided, in accordance with clause 6A.6.1 and schedule 6A.2, that the opening regulatory asset base (RAB) as at the commencement of the 2018–23 regulatory control period, being 1 July 2018, is \$112.8 million (\$nominal). This is set out in section 2.2 of this overview.

In accordance with clause 6A.14.1(5F) of the NER, the AER has decided that the depreciation approach based on forecast capex (forecast depreciation) is to be used to establish the RAB at the commencement of Murraylink's regulatory control period as at 1 July 2023. This is discussed in attachment 5 of our final decision.

In accordance with clause 6A.14.1(6) of the NER, the AER has approved Murraylink's proposed negotiating framework. This is set out in attachment A of our final decision.

In accordance with clause 6A.14.1(7) of the NER, the AER has specified the negotiated transmission services criteria for Murraylink. This is set out in section 3 of the transmission determination.

In accordance with clause 6A.14.1(8) of the NER, the AER has approved Murraylink's proposed pricing methodology. This is set out in attachment B of our final decision.

In accordance with clause 6A.14.1(9) of the NER, the AER has approved the following nominated pass through events to apply to Murraylink for the 2018–23 regulatory control period in accordance with clause 6A.6.9:

- a regulatory change event
- a service standard event
- a tax change event
- a connection charge event

These events have the definitions set out in section 5 of the transmission determination.

B List of submissions

We received three submissions in response to our draft decision and Murraylink's revised proposal. These submissions are available on our website at www.aer.gov.au and are listed below.

Submission	Date received
SA Department of Premier and Cabinet	18 December 2017
Business SA	12 January 2018
Consumer Challenge Panel	31 January 2018
