Draft Decision

Ausgrid Electricity Distribution Determination 2024 to 2029

(1 July 2024 to 30 June 2029)

Attachment 1
Annual revenue requirement

September 2023

AUSTRALIAN ENERGY REGULATOR

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1 Annual revenue requirement

This attachment sets out our draft decision on Ausgrid's annual revenue requirement (ARR) and expected revenues for the provision of standard control services (SCS) over the 2024–29 regulatory control period for its distribution and transmission (dual function assets) networks. Ausgrid's dual function assets are high voltage assets which support the broader NSW/ACT transmission network owned and operated by Transgrid. The AER has decided to continue applying transmission pricing to these assets.[1]

Specifically, we set out our draft decision on:[2]

- the ARRs (unsmoothed), which are the sum of annual building block costs
- the total revenue requirement, which is the sum of the ARRs
- the annual expected revenues (smoothed)
- the X factors.

We determine Ausgrid's ARR using a building block approach. We determine the X factors by smoothing the ARR over the 2024–29 period. The X factor is used in the CPI–X methodology to determine the annual expected revenue (smoothed).

1.1 Draft decision

For the 2024–29 period, we determine total ARRs of $8,592.8 million and $991.0 million ($ nominal, unsmoothed) for Ausgrid's distribution and transmission networks respectively. These amounts reflect our draft decision on the various building block costs and represents a reduction of $137.9 million (1.6%) and an increase of $7.5 million (0.8%) to Ausgrid's proposed total ARRs of $8,730.8 million and $983.5 million for its distribution and transmission networks respectively. For distribution, the reduction in total revenues is largely driven by our draft decision to approve a lower forecast operating expenditure (opex) building block, which have been partially offset by increases to other building blocks such as return on capital, regulatory depreciation and cost of corporate income tax. For transmission, the increase in total revenues is largely driven by the higher return on capital, regulatory depreciation and cost of corporate income tax building blocks.

We determine the annual expected revenue (smoothed) and X factor for each regulatory year of the 2024–29 period by smoothing the ARR. For the 2024–29 period, our draft decision is to approve total expected revenues of $8,624.0 million and $995.6 million ($ nominal, smoothed) for Ausgrid's distribution and transmission networks respectively.

At the time of making this draft decision, we have used placeholder values for certain components such as the rate of return and expected inflation. We will make further updates for these values as part of our final decision. It is for this reason that we expect the total expected revenues approved in our final decision to be different to this draft decision.

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1 AER, *Framework and approach: Ausgrid Endeavour Energy and Essential Energy (New South Wales), Regulatory control period commencing 1 July 2024*, July 2022, p. 54.

2 NER, 6.3.2(a)(1), 6.5.9(a), and 6.5.9(b)(1)–(2).

Table 1.1 and Table 1.2 set out our draft decision on the building block costs, the ARR, annual expected revenue and X factor for the 2024–29 period for Ausgrid's distribution and transmission networks respectively.

Table 1.1 AER's draft decision on Ausgrid's ARR, annual expected revenue and X factor for the 2024–29 period – distribution ($million, nominal)

	2024–25	2025–26	2026–27	2027–28	2028–29	Total
Return on capital	932.0	972.3	1,013.6	1,054.7	1,096.5	5,069.1
Regulatory depreciation[a]	74.0	101.2	131.6	143.1	129.2	579.2
Operating expenditure[b]	434.9	450.2	464.7	481.3	498.8	2,329.9
Revenue adjustments[c]	165.5	216.1	81.3	16.7	28.6	508.1
Cost of corporate income tax	20.3	20.4	21.7	22.8	21.3	106.5
Annual revenue requirement (unsmoothed)	1,626.7	1,760.3	1,713.0	1,718.6	1,774.3	8,592.8
Annual expected revenue (smoothed)	**1,549.0**	**1,649.1**	**1,755.6**	**1,808.1**	**1,862.3**	**8,624.0**
X factor[d]	n/a[e]	–3.56%	–3.56%	–0.19%	–0.19%	n/a

Source: AER analysis.

(a) Regulatory depreciation is straight-line depreciation net of the inflation indexation on the opening regulatory asset base (RAB).

(b) Includes debt raising costs.

(c) Includes revenue adjustments from the efficiency benefit sharing scheme (EBSS), the capital expenditure sharing scheme (CESS), shared asset adjustments and the demand management innovation allowance mechanism (DMIAM).

(d) 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.

(e) Ausgrid is not required to apply an X factor for 2024–25 because we set the 2024–25 expected revenue in this decision. The expected revenue for 2024–25 is around 3.6% higher than the approved total annual revenue for 2023–24 in real terms, or 6.5% higher in nominal terms.

Table 1.2 AER's draft decision on Ausgrid's ARR, annual expected revenue and X factor for the 2024–29 period – transmission ($million, nominal)

	2024–25	2025–26	2026–27	2027–28	2028–29	Total
Return on capital	145.5	149.8	153.6	157.2	161.8	768.0
Regulatory depreciation[a]	7.2	11.0	15.3	17.0	14.6	65.1
Operating expenditure[b]	22.8	23.6	24.3	25.1	26.0	121.8
Revenue adjustments[c]	7.2	9.7	2.9	–0.4	0.2	19.5
Cost of corporate income tax	3.0	3.4	3.6	3.2	3.4	16.6
Annual revenue requirement (unsmoothed)	185.7	197.4	199.7	202.2	206.0	991.0
Annual expected revenue (smoothed)	**159.4**	**196.6**	**214.3**	**213.2**	**212.1**	**995.6**
X factor[d]	n/a[e]	–20.00%	–6.00%	3.21%	3.21%	n/a

Source: AER analysis.
(a) Regulatory depreciation is straight-line depreciation net of the inflation indexation on the opening RAB.
(b) Includes debt raising costs.
(c) Includes revenue adjustments from the EBSS and CESS.
(d) 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.
(e) Ausgrid is not required to apply an X factor for 2024–25 because we set the 2024–25 expected revenue in this decision. The expected revenue for 2024–25 is around 33.6% higher than the approved total annual revenue for 2023–24 in real terms, or 37.3% higher in nominal terms.

1.2 Ausgrid's proposal

For the 2024–29 period, Ausgrid proposed total expected revenues (smoothed) of $8,771.5 million and $992.7 million ($ nominal) for its distribution and transmission networks respectively.

Table 1.3 and Table 1.4 set out Ausgrid's proposed building block costs, the ARR, annual expected revenue and X factor for each year of the 2024–29 period for its distribution and transmission networks respectively.

Table 1.3 Ausgrid's proposed ARR, annual expected revenue and X factor for the 2024–29 period – distribution ($million, nominal)

	2024–25	2025–26	2026–27	2027–28	2028–29	Total
Return on capital	917.9	961.6	1,008.1	1,054.6	1,102.3	5,044.5
Regulatory depreciation[a]	66.3	95.9	126.6	140.9	128.8	558.6
Operating expenditure[b]	462.1	484.0	501.8	520.6	539.8	2,508.1
Revenue adjustments[c]	150.9	229.7	94.0	29.1	35.3	539.0
Cost of corporate income tax	16.7	16.2	15.7	16.6	15.4	80.5
Annual revenue requirement (unsmoothed)	1,613.7	1,787.4	1,746.2	1,761.8	1,821.6	8,730.8
Annual expected revenue (smoothed)	**1,539.4**	**1,640.1**	**1,747.3**	**1,861.5**	**1,983.2**	**8,771.5**
X factor	n/a[d]	–3.56%	–3.56%	–3.56%	–3.56%	n/a

Source: Ausgrid, *Att. 4.1.b – PTRM for* Distribution, January 2023.
(a) Regulatory depreciation is straight-line depreciation net of the inflation indexation on the opening RAB.
(b) Includes debt raising costs.
(c) Includes revenue adjustments from EBSS, CESS, shared asset adjustments and DMIAM.
(d) Ausgrid is not required to apply an X factor for 2024–25 because we set the 2024–25 expected revenue in this decision.

Table 1.4 Ausgrid's proposed ARR, annual expected revenue and X factor for the 2024–29 period – transmission ($million, nominal)

	2024–25	2025–26	2026–27	2027–28	2028–29	Total
Return on capital	143.1	147.5	151.7	155.7	160.7	758.7
Regulatory depreciation[a]	5.7	9.9	14.4	16.6	14.5	61.1
Operating expenditure[b]	24.1	25.3	26.2	27.1	28.1	130.8
Revenue adjustments[c]	1.2	11.4	4.6	1.3	1.6	20.0
Cost of corporate income tax	2.5	2.7	2.8	2.3	2.6	12.9
Annual revenue requirement (unsmoothed)	176.7	196.7	199.6	203.0	207.4	983.5
Annual expected revenue (smoothed)	**155.2**	**174.4**	**195.9**	**220.0**	**247.2**	**992.7**
X factor	n/a[d]	–9.20%	–9.20%	–9.20%	–9.20%	n/a

Source: Ausgrid, *Att. 4.1.d – PTRM for* Transmission, January 2023.
(a) Regulatory depreciation is straight-line depreciation net of the inflation indexation on the opening RAB.
(b) Includes debt raising costs.
(c) Includes revenue adjustments from EBSS and CESS.
(d) Ausgrid is not required to apply an X factor for 2024–25 because we set the 2024–25 expected revenue in this decision.

1.3 Assessment approach

In this section, we describe the building block approach used to determine the ARR and expected revenue for Ausgrid for each year of the 2024–29 period.[3]

1.3.1 The building block approach

The ARR is calculated using the post-tax revenue model (PTRM).[4] For the applicable control mechanism (Attachment 13) applying to SCS, the revenue to be earned by the distributor (expected revenues) for the regulatory control period must be equal to the net present value (NPV) of the total revenue requirement.[5] The total revenue requirement is the sum of the ARRs for the regulatory control period. In turn, the ARR must be determined using a building block approach.[6] Therefore, we adopt a building block approach when making our decision on Ausgrid's total ARR and expected revenue for each regulatory year of the regulatory control period. Under this approach, we determine the value of the building block costs that make up the ARR for each regulatory year. The ARR for each year is the sum of the building block costs. These building block costs are set out in section 1.3.2.

We developed the PTRM, which brings together the various building block costs and calculates the ARR for each year of the regulatory control period.[7] The PTRM also calculates the X factors required under the CPI–X methodology[8] which is used to escalate the expected revenue for each year (other than the first year) of the regulatory control period.[9] Using the X factors and ARR, the annual expected revenue (smoothed) is forecast for each year of the regulatory control period. Ausgrid's proposal must be prepared using our PTRM.[10]

The ARR can be lumpy over the regulatory control period. To minimise price shocks, revenues are smoothed within a regulatory control period while maintaining the principle of cost recovery under the building block approach. Smoothing requires diverting some of the cost recovery to adjacent years within the regulatory control period so that the NPV of the annual expected revenue (smoothed revenues) is equal to the NPV of the ARR (unsmoothed revenues). That is, a smoothed profile of the expected revenue is determined for the regulatory control period under the CPI–X methodology.

The expected revenue for the first year is generally set equal to the ARR for the first year of the regulatory control period. At times, it may be more appropriate to set the expected revenue for the first year to align with the revenue from the last year of the previous regulatory control period to avoid any large revenue variation between periods (or P_0).[11]

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3 NER, cll. 6.3.2(a)(1), 6.5.9(b)(2).

4 NER, cl. 6.4.2.

5 NER, cl. 6.5.9(b)(3)(i).

6 NER, cl. 6.4.3.

7 NER, cl. 6.4.2.

8 NER, cl. 6.2.6(a).

9 NER, cl. 6.5.9.

10 NER, cl. 6.3.1(c).

11 The expected revenue for year 1 of the next regulatory control period may include adjustments for the performance incentive that applied during the previous regulatory control period, and under or over recovery adjustments from previous regulatory years.

In this determination for Ausgrid, we first calculate the ARR for each year of the 2024–29 regulatory control period. To do this we consider the various costs facing Ausgrid and the trade-offs and interactions between these costs, service quality and across years. This reflects our holistic assessment of Ausgrid's proposal.

We understand the trade-offs that occur between building block costs and test the sensitivity of these costs to their various driver elements. These trade-offs are discussed in the interrelationships section of the various attachments to this draft decision and are reflected in the calculations made in the PTRM.[12] Such understanding allows us to exercise judgement in determining the final inputs into the PTRM and the ARRs that result from this modelling.

Having determined the total revenue requirement for the 2024–29 period, we smooth the ARR for each regulatory year across that period. This step reduces revenue variations between years and calculates the expected revenue and X factor for each year.[13] The X factors equalise (in NPV terms) the total expected revenues to be earned by Ausgrid with the total revenue requirement for the 2024–29 regulatory control period.[14] The X factors must also minimise, as far as reasonably possible, the variance between the expected revenue and ARR for the last regulatory year of the period.[15] By minimising this divergence, it helps to manage the prospect of a significant revenue change (and consequently prices) between the last year of the 2024–29 period, and first year of the following 2029–34 period. We consider a divergence of up to 3% between the expected revenue and ARR for the last year of the regulatory control period is reasonable, if this can promote smoother price changes across the regulatory control periods.

The building block costs (and the elements that drive those costs) used to determine the unsmoothed ARR are set out in section 1.3.2.

1.3.2 Building block costs

The efficient costs to be recovered by a distributor can be thought of as being made up of various building block costs. Our draft decision assesses each of the building block costs and the elements that drive these costs. The building block costs are approved reflecting trade-offs and interactions between the cost elements, service quality and across years.

Table 1.5 shows the building block costs that form the ARR for each year and where discussion on the elements that drive these costs can be found within this draft decision.

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12 There are trade-offs that are not modelled in the PTRM but are reflected in the inputs to the PTRM. For example, service quality is not explicitly modelled in the PTRM, but the trade-offs between service quality and price are reflected in the forecast capital expenditure and operating expenditure inputs to the model. Other trade-offs are obvious from the calculations in the PTRM. For example, while it may be expected that a lower RAB would also lower revenues, the PTRM shows that this will not occur if the reduction in the RAB is due solely to an increase in the depreciation rate. In such circumstances, revenues increase as the increased depreciation more than offsets the reduction in the return on capital caused by the lower RAB.

13 NER, cl. 6.5.9(a).

14 NER, cl. 6.5.9(b)(3)(i). The X factors represent the real revenue path over the 2024–29 period under the CPI–X framework.

15 NER, cl. 6.5.9(b)(2).

Table 1.5 Building block costs

Building block costs	Attachments where elements are discussed
Return on capital	Regulatory asset base (Attachment 2) Rate of return (Attachment 3) Capital expenditure (Attachment 5)
Regulatory depreciation (return of capital)	Regulatory asset base (Attachment 2) Regulatory depreciation (Attachment 4) Capital expenditure (Attachment 5)
Operating expenditure	Operating expenditure (Attachment 6)
Estimated cost of corporate tax	Corporate income tax (Attachment 7)
Other revenue adjustments	
Adjustment for shared assets	Annual revenue requirement (Attachment 1)
Operating efficiency benefits/penalties	Efficiency benefit sharing scheme (Attachment 8)
Capital efficiency benefits/penalties	Capital expenditure sharing scheme (Attachment 9)
Demand management innovation allowance	Demand management incentive scheme and Demand management innovation allowance mechanism (Attachment 11)

1.4 Reasons for draft decision

For the 2024–29 period, we determine total ARRs of $8,592.8 million and $991.0 million ($ nominal, unsmoothed) for Ausgrid's distribution and transmission networks respectively. These amounts are a reduction of $137.9 million (1.6%) and an increase of $7.5 million (0.8%) to Ausgrid's proposed total ARRs of $8,730.8 million and $983.5 million for its distribution and transmission networks respectively. These changes reflect the impact of our draft decision on the various building block costs.

The changes we made to Ausgrid's proposed building blocks for its distribution and transmission networks respectively include (in nominal terms):

- increases in the return on capital of $24.5 million (0.5%) and $9.3 (1.2%) (Attachments 2, 3 and 5). This is driven largely by a higher rate of return[16] which more than offsets the reductions we made to forecast capex
- increases in the regulatory depreciation of $20.6 million (3.7%) and $4.0 million (6.6%) (Attachments 2, 4 and 5). The reduction in the forecast capex has been more than offset by a lower expected inflation rate for the 2024–29 period, which reduces the indexation adjustment to regulatory depreciation
- reductions in the opex forecast of $178.2 million (7.1%) and $8.9 million (6.8%) (Attachment 6). This is driven by the exclusion of some of Ausgrid's proposed base year

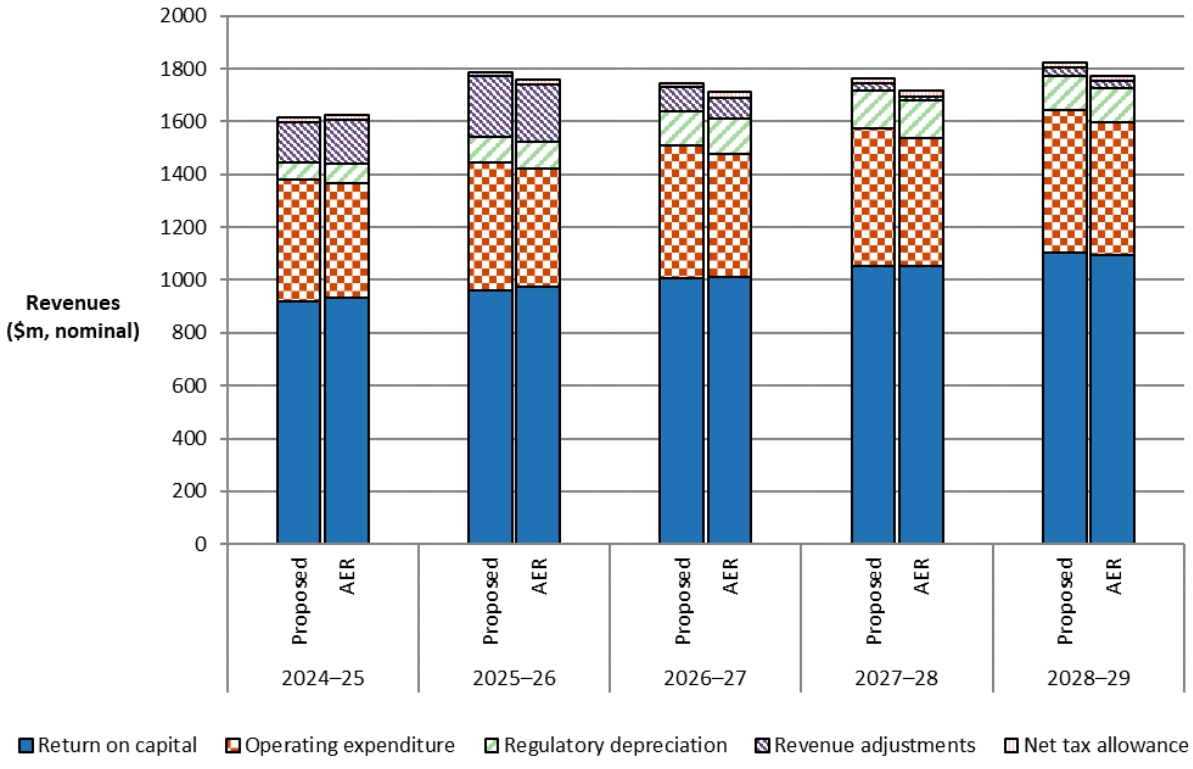
[16] Average rate of return over the 2024–29 period.

adjustments and step changes, resulting in our lower alternative total forecast opex estimate.

- increases in the cost of corporate income tax of $26.0 million (32.3%) and $3.7 million (28.6%) (Attachment 7). For distribution, this is driven by a lower tax depreciation in our draft decision resulting from the reduction to forecast capex.[17] For transmission, this is driven by both a lower tax depreciation and higher regulatory depreciation in our draft decision[18]
- reductions in the revenue adjustments of $30.9 million (5.7%) and $0.5 million (2.7%) (Attachments 8, 9 and 11). For distribution, this is largely driven by a lower CESS reward in our draft decision. For transmission, this is driven by a lower expected inflation rate applied in our draft decision.

Figure 1.1 and Figure 1.2 show the building block components from our determination that make up the ARR for Ausgrid, and the corresponding components from its proposal, for its distribution and transmission networks.

Figure 1.1 AER's draft decision and Ausgrid's proposed ARR – distribution ($million, nominal)

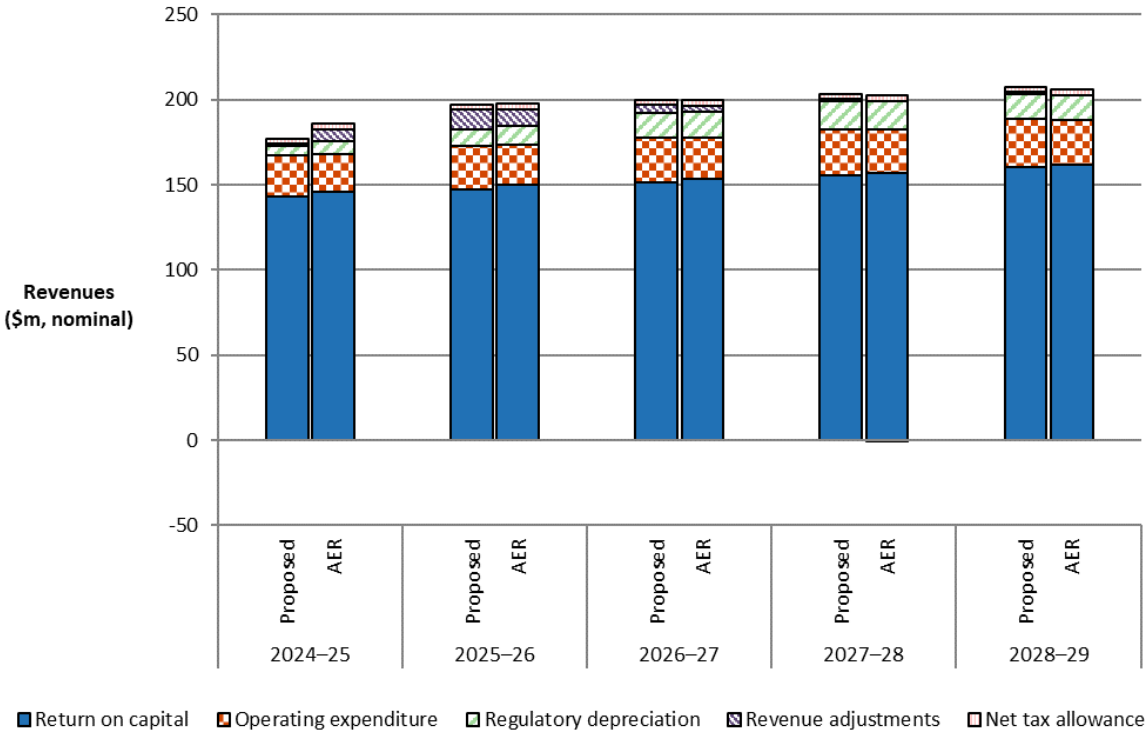


Source: AER analysis; Ausgrid, *Att. 4.1.b – PTRM for Distribution,* January 2023.
Note: Revenue adjustments include EBSS, CESS, shared asset adjustments and DMIAM amounts. Opex includes debt raising costs.

17 All else being equal, a lower tax depreciation increases the cost of corporate income tax as it is a component of the tax expense.

18 All else being equal, a higher regulatory depreciation increases the cost of corporate income tax as it is a component of revenue for tax purposes.

Figure 1.2 AER's draft decision and Ausgrid's proposed ARR – transmission ($million, nominal)



Source: AER analysis; Ausgrid, *Att. 4.1.d – PTRM for Transmission,* January 2023.
Note: Revenue adjustments include EBSS and CESS. Opex includes debt raising costs.

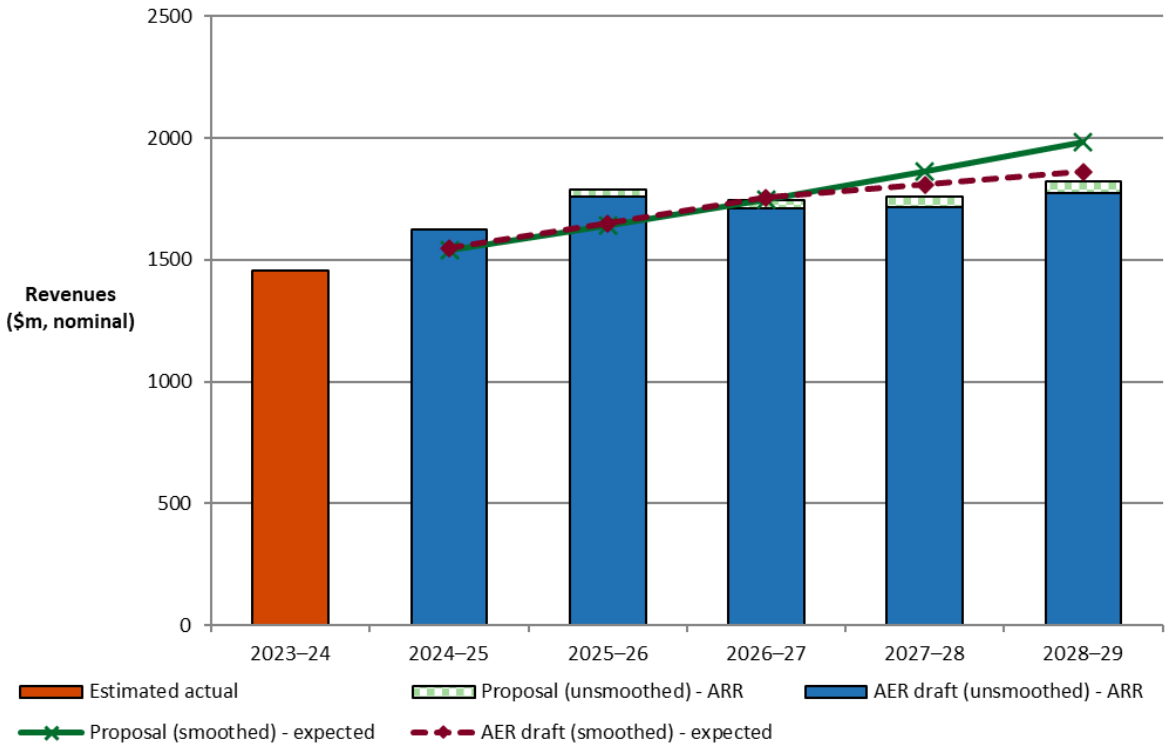
1.4.1 X factor and annual expected revenue

For this draft decision, we determine X factors for Ausgrid as set out in **Error! Reference s ource not found.** and
Table 1.2 for its distribution and transmission networks respectively. The NPVs of the ARRs are $7,237.5 million and $833.9 million ($ nominal) as at 1 July 2024 for Ausgrid's distribution and transmission networks respectively. Based on these NPVs and applying the CPI–X framework, we determine that the:

- expected revenue (smoothed) for Ausgrid's distribution network is $1,549.0 million in 2024–25 increasing to $1,862.3 million in 2028–29 ($ nominal). The resulting total expected revenue is $8,624.0 million for the 2024–29 period.
- expected revenue (smoothed) for Ausgrid's transmission network is $159.4 million in 2024–25 increasing to $212.1 million in 2028–29 ($ nominal). The resulting total expected revenue is $995.6 million for the 2024–29 period.

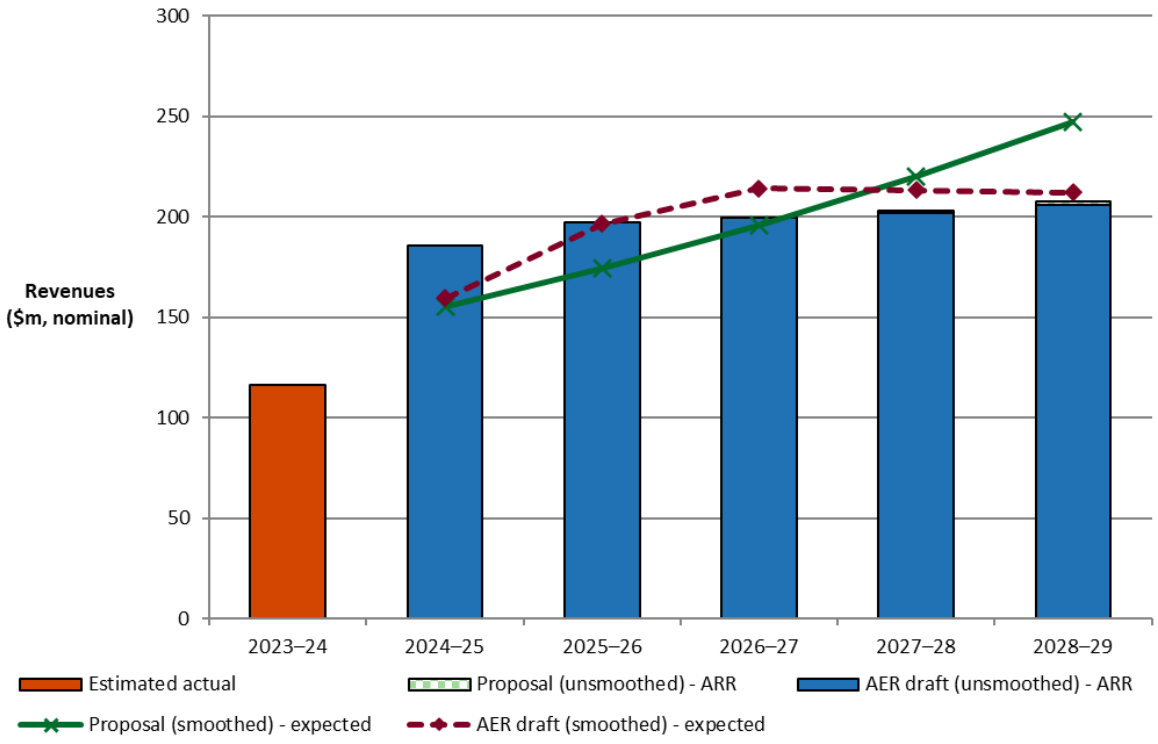
Figure 1.3 and Figure 1.4 show our draft decision on Ausgrid's annual expected revenue (smoothed revenue) and the ARR (unsmoothed revenue) for the 2024–29 period for its distribution and transmission networks respectively.

Figure 1.3 AER's draft decision on Ausgrid's revenue for the 2024–29 period – distribution ($million, nominal)



Source: AER analysis.

Figure 1.4 AER's draft decision on Ausgrid's revenue for the 2024–29 period – transmission ($million, nominal)



Source: AER analysis.
Note: Our draft decision ARR per annum is not materially different to Ausgrid's proposal.

Note: The revenue in 2023–24 includes the impact of a one-off large negative revenue adjustment for the 2014–19 remittal decision which is included in the 2019–24 determination for Ausgrid's dual function assets.

To determine the profile of expected revenue for Ausgrid over the 2024–29 period, we have set the expected revenue for the first regulatory year at $1,549.0 million and $159.4 million ($ nominal) for its distribution and transmission networks respectively. These are $77.6 million and $26.3 million lower than the respective ARRs for that first year. We then apply an expected inflation rate of 2.80% per annum and a profile of X factors to determine the expected revenue in subsequent years.[19]

The X factors we set must be such as to minimise, as far as reasonably possible, the variance between the expected revenue (smoothed) and the ARR (unsmoothed) in the last year of the 2024–29 period.[20] This helps to minimise any potential large revenue variance (and thus price shocks) at the commencement of the 2029–34 period. Our standard approach has been to keep a divergence of up to +/–3% between the smoothed and unsmoothed revenues for the last year of the regulatory period, if this can achieve smoother price changes across the regulatory control periods.

For Ausgrid's distribution and transmission networks, Ausgrid's proposed revenue smoothing profiles result in a final year revenue difference between its expected revenue and ARR of 8.9% and 19.2% respectively. Ausgrid's proposal did not apply our preferred final year revenue difference limit due to concerns that doing so would result in significant increases in revenue in the first year of the 2024–29 period.[21] Instead, Ausgrid proposed to apply a revenue smoothing profile which result in constant X factors over the 2024–29 period for both its distribution and transmission networks. It stated that this approach was largely supported by stakeholders during its stakeholder engagement on its Draft plan.[22]

For this draft decision, our approach is to smooth the increase in expected revenues over the first three regulatory years (2024–25 to 2026–27) for Ausgrid's distribution and transmission networks respectively. This results in the final year revenue difference of 5.0% and 3.0% for Ausgrid's distribution and transmission networks respectively, which are both lower than Ausgrid's proposal:

- For distribution, our draft decision approach results in an X factor profile that limits the initial revenue increase in the first year of the 2024–29 period, which was supported by stakeholders whilst balancing the requirements of the NER. An alternative smoothing approach would be to apply a final year difference of 3% which has the benefit of potentially achieving a smoother price change for customers in the first year of the 2029–32 period. However, this would result in higher real revenue increases of 4.2% per annum compared to our draft decision of 3.9% per annum over the first three years of the 2024–29 period.
- For transmission, our draft decision approach results in an X factor profile with a large revenue increase in the first year of the 2024–29 period. Ausgrid's transmission revenue

19 NER, cl. 6.5.9(a).

20 NER, cl. 6.5.9(b)(2).

21 Ausgrid, *2024–29 Regulatory Proposal*, January 2023, p. 60.

22 Ausgrid, *2024–29 Regulatory Proposal*, January 2023, p. 60.

smoothing profile for the 2024–29 period is impacted by the outcome of Ausgrid's appeal to the Australian Competition Tribunal of the 2014–19 determination which resulted in a large one-off negative revenue adjustment for the 2019–24 period. This resulted in a smoothed 2023–24 expected revenue that is lower than would normally be the case. Accordingly, this is causing a large step-up in revenue for the first year of the 2024–29 period. We note that Ausgrid's transmission revenues only make up a small portion of its total combined revenues and hence the transmission smoothing profile is not expected to have a material impact on the price paths experienced by customers. Our draft decision therefore applies our preferred final year difference of ±3% target range which will minimise the impact of the 2014–19 remittal decision persisting into the 2029–34 period.

On balance, we consider that our profiles of X factors for this draft decision result in expected revenues in the last year of the regulatory control period that is as close as reasonably possible to the ARRs for that year for Ausgrid's distribution and transmission respectively.[23] We will review the revenue smoothing profiles again for the final decision.

Our draft decision results in an average increase of 5.1% and 12.8% per annum ($ nominal) in the expected revenues over the 2024–29 period for Ausgrid's distribution and transmission network respectively:[24]

- For its distribution network, this consists of initial increases of 6.5% per annum in 2024–25 to 2026–27, followed by annual increases of 3.0% over the remaining 2 years of the 2024–29 period.[25]
- For its transmission network, this consists of initial increases of 37.3% in 2024–25[26] and 23.4% in 2025–26, followed by a further increase of 9.0% in 2026–27. The expected revenues are to reduce by 0.5% per annum over the remaining 2 years of the 2024–29 period.[27]

Our draft decision results in a reduction of 0.6% in real terms ($2023–24) to Ausgrid's total ARR relative to that in the 2019–24 period for its distribution network. Its transmission network sees an increase of 87.8% in real terms ($2023–24) over the same period. For distribution, the outcome is largely due to a lower opex and regulatory depreciation amount in this draft decision for the 2024–29 period than those approved in the 2019–24 determination. For transmission, the outcome is largely due to a higher revenue adjustment in this draft decision for the 2024–29 period due to the expiry of a one-off large negative revenue

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23 NER, cl. 6.5.9(b)(2).

24 In real 2023–24 dollar terms, our approved expected revenue for Ausgrid results in an average increase of 2.2% per annum and 9.7% per annum over the 2024–29 period for its distribution and transmission networks respectively.

25 In real 2023–24 dollar terms, this consists of initial increases of 3.6% per annum in 2024–25 to 2026–27, followed by annual increases of 0.2% over the remaining 2 years of the 2024–29 period.

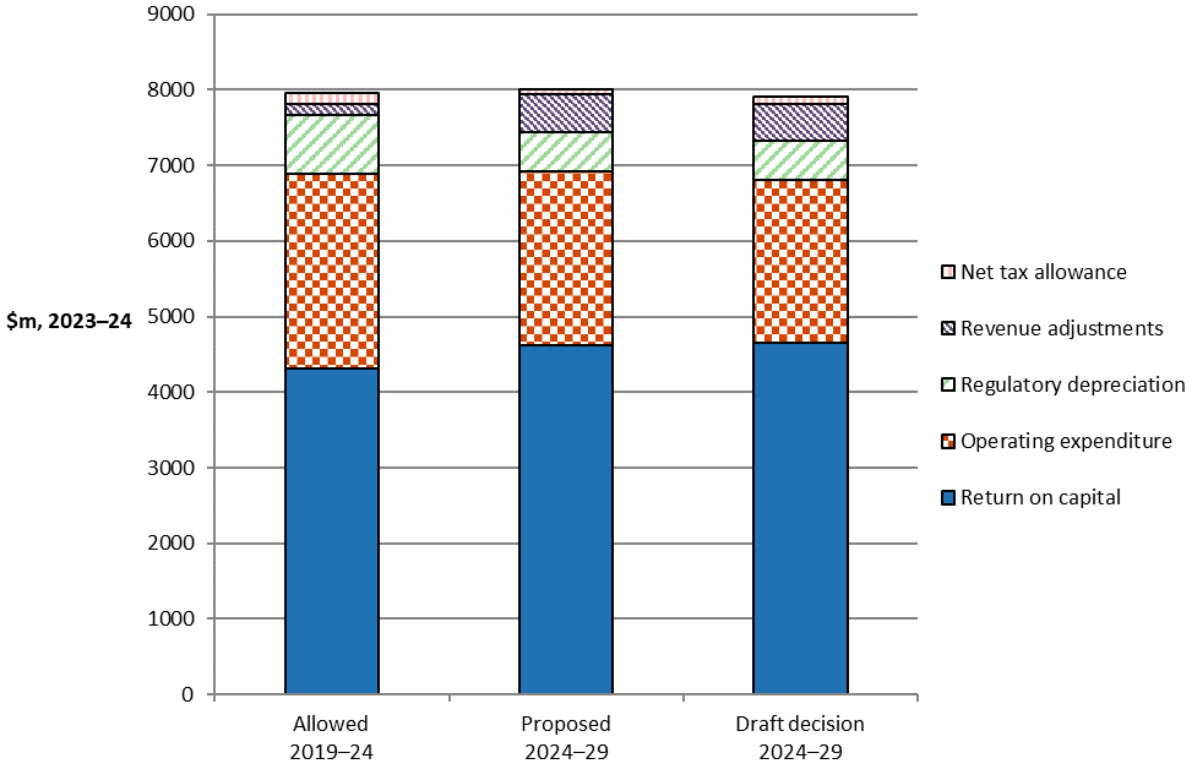
26 The large change in expected revenue from 2023–24 to 2024–25 revenue is due to the impact of a one-off large negative revenue adjustment for the 2014–19 remittal decision which was included in the 2019–24 determination for Ausgrid's dual function assets.

27 In real 2023–24 dollar terms, this consists of initial increases of 33.6% in 2024–25 and 20.0% in 2025–26, and a further increase of 6.0% in 2026–27; followed by decreases of 3.2% per annum over the remaining 2 years of the 2024–29 period.

adjustment for the 2014–19 remittal decision included in the 2019–24 determination for Ausgrid's dual function assets.

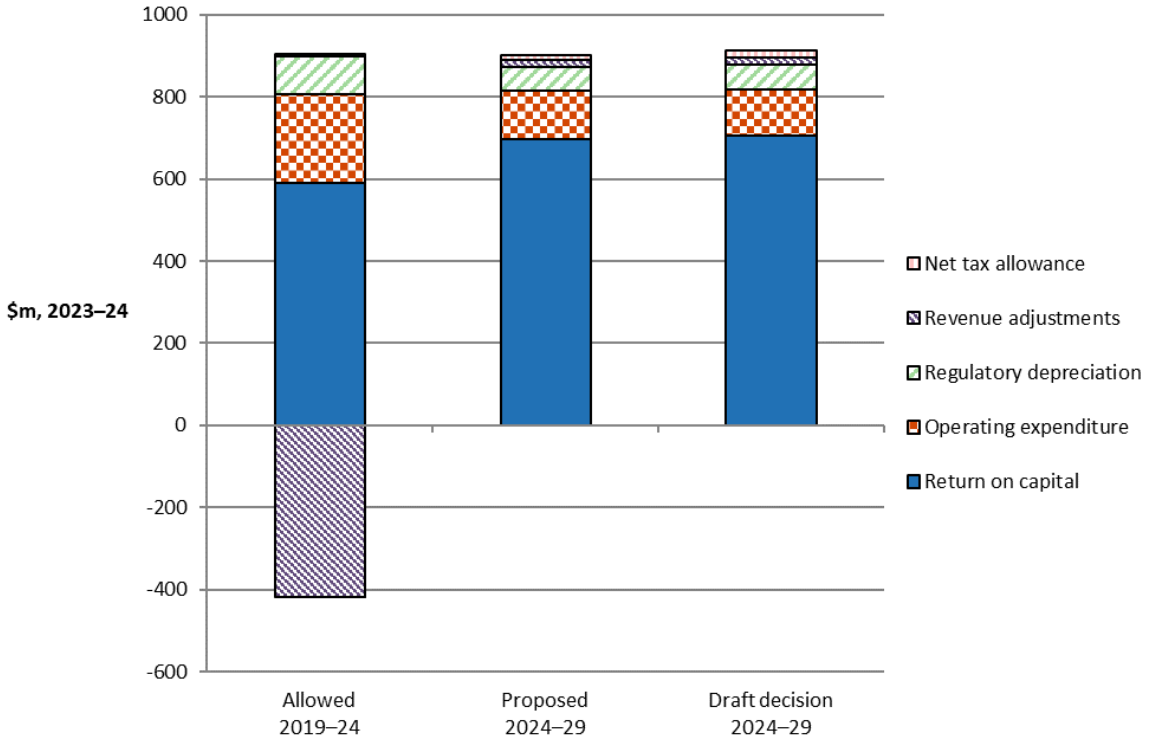
Figure 1.5 and Figure 1.6 compare our draft decision building blocks for Ausgrid's distribution and transmission networks for the 2024–29 period with its proposal for the same period, and the approved unsmoothed revenue for the 2019–24 period.

Figure 1.5 Total revenue by building block components – distribution ($million, 2023−24)



Source: AER analysis.

Figure 1.6 Total revenue by building block components – transmission ($million, 2023−24)



Source: AER analysis.
Note: The allowed 2019–24 revenue adjustments include a one-off large negative revenue adjustment for the 2014–19 remittal decision which was included in the 2019–24 determination for Ausgrid's dual function assets.

1.4.2 Shared assets

Distributors, such as Ausgrid, may use assets to provide both the SCS we regulate and unregulated services, for example by the stringing of telecommunications cables on the electricity network poles for the provision of telecommunication services. These assets are called 'shared assets'.[28] If the revenue from shared assets is material, 10% of the unregulated revenues that a distributor earns from shared assets will be used to reduce the distributor's revenue for SCS.[29]

The shared asset principles establish that use of shared assets should be material before cost reductions are applied.[30] The National Electricity Rules (NER) do not define materiality in this context. Our approach to what constitutes a material use of shared assets is that unregulated use of shared assets in a specific regulatory year is material when a distributor's annual average unregulated revenue from shared assets is expected to be greater than 1% of its expected revenue for that regulatory year.[31]

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28 NER, cl. 6.4.4.

29 AER, *Shared asset guideline*, November 2013, Appendix A, p. 15.

30 NER, cl. 6.4.4(c)(3).

31 AER, *Shared asset guideline*, November 2013, pp. 8–9.

Ausgrid submitted that it would receive $166.0 million ($2023–24) in shared asset revenues over the 2024–29 period.[32] These additional revenues exceed the AER's materiality threshold of 1% of Ausgrid annual expected revenues and is therefore subject to a shared asset adjustment.[33] Accordingly, 10% of these additional revenues will be shared with customers through a revenue adjustment in the PTRM.

We consider Ausgrid's forecast unregulated revenues from shared assets for the 2024–29 period are reasonable, noting that its forecasts for the 2024–29 period are expected to increase significantly from the 2019–24 period. However, Ausgrid's forecast unregulated revenues must be compared to the regulated revenues we determine, rather than those proposed by Ausgrid. Our draft decision sets a lower total expected revenue than Ausgrid's proposal for the 2024–29 period. However, we estimate that the unregulated revenues will still be greater than 1% of the expected revenues in each year of the 2024–29 period. Therefore, the materiality threshold is met in each year of the 2024–29 period and we apply a shared asset revenue adjustment over this period.[34]

For this draft decision, we determine a shared asset revenue adjustment as shown in Table 1.6. The adjustment will see $16.6 million ($2023–24) shared with customers across the 2024–29 period. Ausgrid's proposed a shared asset revenue adjustment of $15.2 million is inconsistent with the amount calculated under the method required by the shared asset guideline. In its response to our information request, Ausgrid agreed with our amended revenue adjustment amount of $16.6 million to be applied to its distribution network.[35]

Table 1.6 AER's draft decision on Ausgrid's shared asset revenue adjustment ($million, 2023–24)

	2024–25	2025–26	2026–27	2027–28	2028–29	Total
Ausgrid's proposal	–2.8	–2.9	–3.2	–3.1	–3.2	–15.2
AER draft decision	**–2.9**	**–3.1**	**–3.5**	**–3.5**	**–3.6**	**–16.6**

Source: AER analysis; Ausgrid, *Att. 4.1.b – PTRM for Distribution,* January 2023.

1.4.3 Indicative average distribution price impact

Our draft decision on Ausgrid's expected revenues ultimately affects the prices customers pay for electricity. There are several steps required in translating our revenue decision into indicative distribution price impacts.

We regulate Ausgrid's SCS for its distribution and transmission networks under a revenue cap form of control. This means our draft decision on Ausgrid's expected revenues does not directly translate to price impacts. This is because Ausgrid's revenue is fixed under the

32 Ausgrid, *RIN.10 - 2024-2029 - Reset RIN - workbook 1 - forecast data*, January 2023; Ausgrid, *Att. 4.1 - 2024-29 Proposed revenue*, January 2023, p. 14.

33 AER, *Shared asset guideline*, November 2013, p. 8.

34 We will reassess the materiality of the forecast shared asset unregulated revenues for our final decision.

35 AER, *Response to information request IR023*, 11 May 2023. In its information request, Ausgrid clarified that it proposed to apply the revenue adjustment amount to only its distribution network because the unregulated revenues were predominately received from shared use of distribution assets.

revenue cap form of control, so changes in the consumption of electricity will affect the prices ultimately charged to consumers.

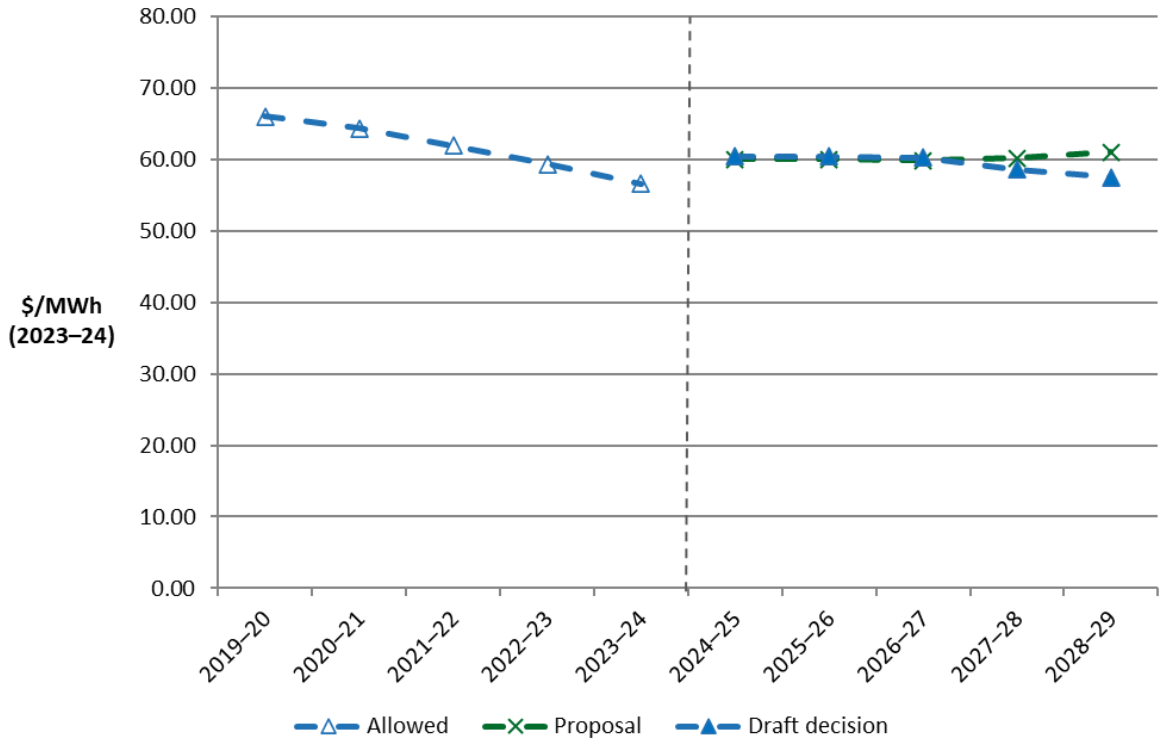
For Ausgrid's distribution network, we are not required to establish the distribution prices as part of this determination. However, we will assess Ausgrid's annual pricing proposals before the commencement of each regulatory year within the 2019–24 period. In each assessment we will administer the pricing requirements set in this distribution determination.

For Ausgrid's transmission network, the charges are collected with regard to the entire transmission network across NSW/ACT because Ausgrid's dual function assets are a small, embedded component of the broader transmission network. Transgrid, which is the coordinating transmission network service provider for this network region, establishes transmission charges and then provides Ausgrid with its portion of revenues.

For this draft decision, we have estimated some indicative average distribution and transmission price impacts flowing from our determination on the expected revenues for Ausgrid over the 2024–29 period. In this section, our estimates only relate to SCS (that is, the core electricity network charges), not alternative control services (such as metering charges). These indicative price impacts assume that actual energy consumption across the 2024–29 period matches Ausgrid's forecast energy consumption, which we have adopted for this draft decision. We also have not factored in any changes arising from incentive scheme amounts, cost pass throughs or unders/overs reconciliation that usually occur in the annual pricing process to come up with the total allowed revenue.

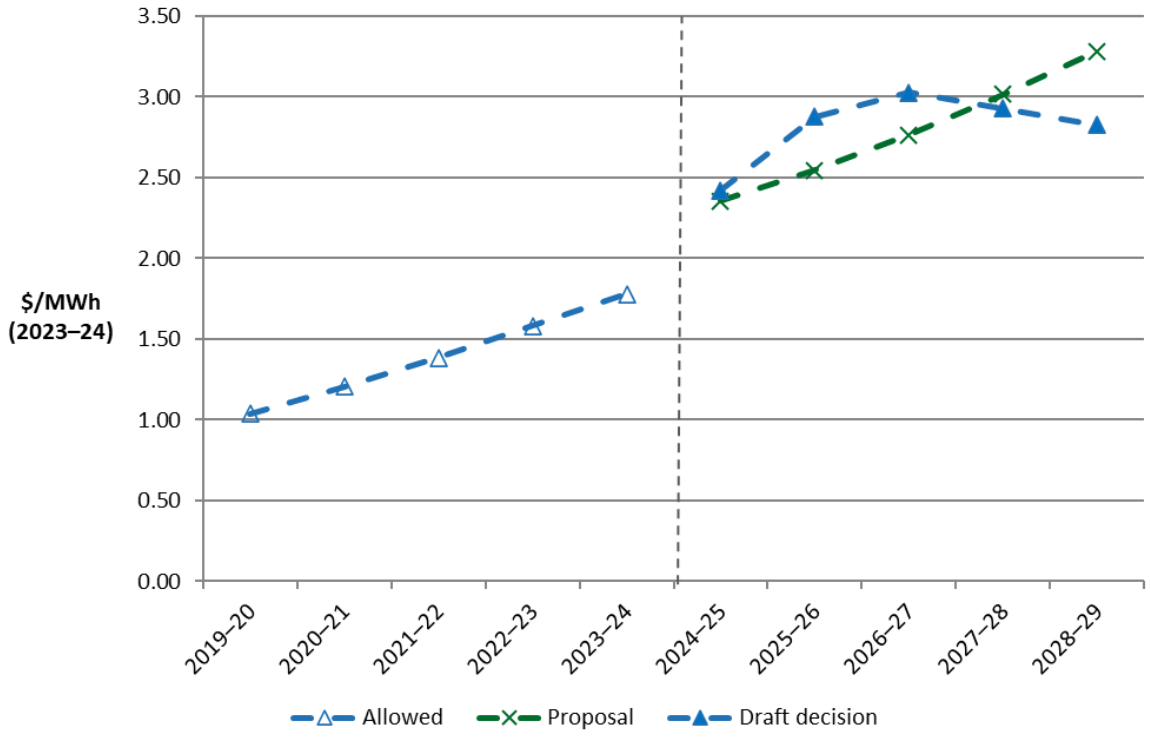
Figure 1.7 and Figure 1.8 show Ausgrid's indicative average price paths over the period from 2019–20 to 2028–29 in real 2023–24 dollar terms based on the expected revenues established in our draft decision compared to Ausgrid's proposed revenue requirements for its distribution and transmission networks respectively. The indicative price path is estimated using the approved expected revenue and dividing by forecast energy consumption for each year of the 2019–24 period.

Figure 1.7 Indicative price path for Ausgrid – distribution ($/MWh, 2023–24)



Source: AER analysis.

Figure 1.8 Indicative price path for Ausgrid – transmission ($/MWh, 2023–24)



Source: AER analysis.

Note: The allowed 2019–24 price path includes the impact of a one-off large negative revenue adjustment for the 2014–19 remittal decision which was included in the 2019–24 determination for Ausgrid's dual function assets.

We estimate that our draft decision on Ausgrid's annual expected revenue will result in a reduction to average distribution charges by about 0.7% per annum, but an increase to average transmission charges by about 9.2% per annum, over the 2024–29 period in real 2023–24 dollar terms.[36] This compares to the real average increases of approximately 0.5% and 12.5% per annum proposed by Ausgrid over the 2024–29 period for its distribution and transmission networks respectively.[37] These high-level estimates reflect the aggregate change across the entire network and do not reflect the particular tariff components for specific end users.

Table 1.7 and Table 1.8 display in nominal terms the comparison of the revenue and price impacts of Ausgrid's proposal and our draft decision for its distribution and transmission networks respectively.

Table 1.7 Comparison of revenue and price impacts of Ausgrid's proposal and the AER's draft decision – distribution ($ nominal)

	2023–24	2024–25	2025–26	2026–27	2027–28	2028–29
AER draft decision						
Revenue ($million)	1,455.0	1,549.0	1,649.1	1,755.6	1,808.1	1,862.3
Price path ($/MWh)[a]	59.52	62.13	63.87	65.43	65.47	66.03
Revenue (change %)	–	6.5%	6.5%	6.5%	3.0%	3.0%
Price path (change %)	–	4.4%	2.8%	2.4%	0.1%	0.9%
Ausgrid proposal						
Revenue ($million)	1,452.8	1,539.4	1,640.1	1,747.3	1,861.5	1,983.2
Price path ($/MWh)[a]	59.43	61.75	63.53	65.12	67.40	70.32
Revenue (change %)	–	6.0%	6.5%	6.5%	6.5%	6.5%
Price path (change %)	–	3.9%	2.9%	2.5%	3.5%	4.3%

Source: AER analysis; Ausgrid, *Att. 4.1.b – PTRM for Distribution*, January 2023.
(a) The price path is in nominal terms and is constructed by dividing nominal expected revenue for SCS by forecast energy consumption for each year of the regulatory control period.

36 In nominal terms we estimate average distribution and transmission charges to increase by 2.1% and 12.3% and per annum for Ausgrid's distribution and transmission networks respectively. These amounts reflect an expected inflation rate of 2.80% per annum as determined in this draft decision.

37 In nominal terms Ausgrid's proposal would decrease distribution and transmission charges by 3.4% and 15.8% per annum for its distribution and transmission networks respectively. These amounts reflect an expected inflation rate of 2.87% per annum as proposed by Ausgrid in its proposal.

Table 1.8 Comparison of revenue and price impacts of Ausgrid's transmission proposal and the AER's draft decision – transmission ($ nominal)

	2023–24	2024–25	2025–26	2026–27	2027–28	2028–29
AER draft decision						
Revenue ($million)	116.1	159.4	196.6	214.3	213.2	212.1
Price path ($/MWh)[a]	1.82	2.49	3.04	3.29	3.27	3.24
Revenue (change %)	–	37.3%	23.4%	9.0%	–0.5%	–0.5%
Price path (change %)	–	37.0%	22.1%	8.3%	–0.6%	–0.8%
Ausgrid proposal						
Revenue ($million)	116.1	155.2	174.4	195.9	220.0	247.2
Price path ($/MWh)[a]	1.82	2.42	2.70	3.01	3.38	3.78
Revenue (change %)	–	33.7%	12.3%	12.3%	12.3%	12.3%
Price path (change %)	–	33.4%	11.2%	11.6%	12.2%	12.0%

Source: AER analysis; Ausgrid, *Att. 4.1.d – PTRM for Transmission*, January 2023.
(a) The price path is in nominal terms and is constructed by dividing nominal expected revenue for SCS by forecast energy consumption for each year of the regulatory control period.

1.4.4 Expected impact of draft decision on electricity bills

The annual electricity bill for customers in Ausgrid's network reflects the combined cost of all the electricity supply chain components—wholesale energy generation, transmission, distribution, metering, and retail costs. This draft decision primarily relates to Ausgrid's distribution charges for SCS and transmission charges, which represent a combined network bill proportion of approximately 21.7% on average for residential customers' and 22.6% on average for small business customers' annual electricity bills in Ausgrid's network area.[38]

We estimate the expected bill impact by varying the distribution and transmission network charges in accordance with our draft decision in this Attachment, while holding all other components—including the metering component and the broader transmission component associated with Transgrid's determination—constant.[39] This approach isolates the effect of our draft decision on the core distribution and transmission network charges only for Ausgrid.

[38] Ausgrid, *Response to AER information request #50, July 2023.* Ausgrid's dual function assets are a small, embedded component of the broader transmission network owned and operated by Transgrid. This combined network bill proportion only accounts for Ausgrid's dual function assets transmission component and does not include the broader transmission component for Transgrid.

[39] We also have not factored in any changes arising from incentive scheme amounts, cost pass throughs or unders/overs reconciliation that usually occur in the annual pricing process to come up with the total allowed revenue.

However, this does not imply that other components will remain unchanged across the regulatory control period.[40]

Based on this approach, we expect that our draft decision on the distribution and transmission components will increase the average annual residential electricity bill in 2028–29 by about $53 ($ nominal) or 2.9% from the 2023–24 total bill level. By comparison, had we accepted Ausgrid's proposal, the expected change in the distribution and transmission components would increase the average annual residential electricity bill in 2028–29 by about $85 ($ nominal) or 4.7% from the 2023–24 total bill level.

Similarly, we expect that our draft decision will result in the distribution and transmission components of the average annual electricity bill for a small business customer in 2028–29 to increase about $144 ($ nominal) or 2.9% from the 2023–24 total bill level. By comparison, had we accepted Ausgrid's proposal, the expected change in the distribution and transmission components would increase the average annual small business electricity bill in 2028–29 by about $234 ($ nominal) or 4.7% from the 2023–24 total bill level.

Our estimated bill impact is based on the typical annual electricity usage of 3,911 kWh and 10,027 kWh for residential and small business customers in Ausgrid's network, respectively.[41] Therefore, customers with different usage will experience different changes in their bills. We also note that there are other factors, such as metering, wholesale and retail costs, which affect electricity bills.

Table 1.9 shows the estimated impact of our draft decision and Ausgrid's proposal on the average annual electricity bills for residential and small business customers in its network over the 2024–29 period.

[40] It also assumes that actual energy consumption will equal the forecast adopted in our draft decision. Since Ausgrid operates under a revenue cap, changes in energy consumption will also affect annual electricity bills across the 2024–29 period.

[41] AER, *Default market offer prices 2023–24: Final determination*, May 2023, p. 6.

Table 1.9 Estimated impact of Ausgrid's proposal and AER's draft decision on annual electricity bills for the 2024–29 period ($ nominal)

	2023–24	2024–25	2025–26	2026–27	2027–28	2028–29
AER draft decision						
Residential annual electricity bill	1,827[a]	1,849	1,864	1,876	1,876	1,880
Annual change[b]	–	22 (1.2%)	15 (0.8%)	12 (0.6%)	0 (0%)	3 (0.2%)
Small business annual electricity bill	4,999[a]	5,059	5,100	5,133	5,133	5,143
Annual change[b]	–	60 (1.2%)	41 (0.8%)	33 (0.6%)	0 (0%)	10 (0.2%)
Ausgrid proposal						
Residential annual electricity bill	1,827[a]	1,847	1,860	1,873	1,890	1,912
Annual change[b]	–	20 (1.1%)	14 (0.7%)	13 (0.7%)	18 (0.9%)	22 (1.2%)
Small business annual electricity bill	4,999[a]	5,052	5,090	5,124	5,173	5,233
Annual change[b]	–	53 (1.1%)	37 (0.7%)	35 (0.7%)	48 (0.9%)	61 (1.2%)

Source: AER analysis; AER, *Default market offer prices 2023–24: Final determination*, May 2023, p. 6; Ausgrid, *Ausgrid - 2023-24 - Annual SCS pricing model*, April 2023.

(a) AER, *Default market offer prices 2023–24: Final determination*, May 2023, p. 6.

(b) Annual change amounts and percentages are indicative. They are derived by varying the networks component of the 2023–24 bill amounts in proportion to yearly expected revenue divided by AEMO's forecast energy delivered in NSW for transmission and forecast energy for distribution as provided by Ausgrid. Actual bill impacts will vary depending on electricity consumption and tariff class.

Shortened forms

Term	Definition
AER	Australian Energy Regulator
ARR	annual revenue requirement
CAPEX	capital expenditure
CESS	capital expenditure sharing scheme
CPI	consumer price index
DMIAM	demand management innovation allowance mechanism
DMO	default market offer
EBSS	efficiency benefit sharing scheme
NER	National Electricity Rules
NPV	net present value
OPEX	operating expenditure
PTRM	post-tax revenue model
RAB	regulatory asset base
RFM	roll forward model
SCS	standard control services