

FINAL DECISION Ausgrid Distribution Determination

2019 to 2024

Attachment 1 Annual revenue requirement

April 2019



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Note

This attachment forms part of the AER's final decision on the distribution determination that will apply to Ausgrid for the 2019-2024 regulatory control period. It should be read with all other parts of the final decision.

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

The final decision includes the following attachments:

Overview

Attachment 1 – Annual revenue requirement

Attachment 2 - Regulatory asset base

Attachment 4 – Regulatory depreciation

Attachment 5 – Capital expenditure

Attachment 7 – Corporate income tax

Attachment 9 - Capital expenditure sharing scheme

Attachment 10 - Service target performance incentive scheme

Attachment 12 - Classification of services

Attachment 13 – Control mechanisms

Attachment 15 – Alternative control services

Attachment 18 - Tariff structure statement

Attachment A – Negotiating framework

Attachment B – Pricing methodology

Contents

No	te		1	-2
Со	nten	ts	1	-3
Sh	ortei	ned forn	ns1	-4
1	Anr	nual rev	enue requirement1	-5
	1.1	Final de	ecision1	-5
	1.2	Ausgrid	d's revised proposal1	-9
	1.3	Assess	sment approach1-1	11
	1.4	Reasor	ns for final decision1-1	11
		1.4.1	Revenue smoothing 1-7	13
		1.4.2	Shared assets1-	14
		1.4.3	Indicative average distribution price impact 1-	15
		1.4.4	Expected impact of decision on electricity bills 1-	19

Shortened forms

Shortened form	Extended form
ACT	Australian Capital Territory
AEMC	Australian Energy Market Commission
AER	Australian Energy Regulator
ARR	annual revenue requirement
CESS	capital expenditure sharing scheme
CPI	consumer price index
distributor	distribution network service provider
DMIAM	demand management innovation allowance mechanism
NER	National Electricity Rules
NSW	New South Wales
opex	operating expenditure
PTRM	post-tax revenue model
RAB	regulatory asset base
RIN	regulatory information notice
TNSP	transmission network service provider

1 Annual revenue requirement

This attachment sets out our final decision on Ausgrid's annual revenue requirements (ARRs) and expected revenues for the 2019–24 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 apply transmission pricing to these assets.¹

The ARR is the sum of the various building block costs for each year of the regulatory control period before smoothing. The ARRs are smoothed across the period to reduce fluctuations between years and to determine expected revenues for each year. The expected revenues are the amounts that Ausgrid will target for annual pricing purposes and recover from customers for the provision of standard control services for each year of the regulatory control period.

1.1 Final decision

We determine a total ARR for Ausgrid for the 2019–24 regulatory control period, reflecting our final decision on the various building block costs, of:

- \$7278.0 million (\$ nominal) for its distribution network. This is a decrease of \$238.4 million (\$ nominal) or 3.2 per cent to Ausgrid's revised proposal of \$7516.3 million.
- \$473.6 million (\$ nominal) for its transmission network. This is a decrease of \$33.2 million (\$ nominal) or 6.6 per cent to Ausgrid's revised proposal of \$506.9 million.

Our final decision includes an estimated \$319.8 million (\$ 2018–19) being returned to customers over the 2019–24 regulatory control period, as confirmed in our final remade decision for the 2014–19 period which accepted Ausgrid's remittal proposal subject to certain modelling adjustments.² This amount is:

- Based on the difference between the revenues Ausgrid recovered during the 2014–19 period (where it set network charges in accordance with enforceable undertakings during 2016–17 to 2018–19)³ and the revenues we approved in our remade decision.⁴
- Comprised of our estimate of \$42.7 million to be included in the total revenues for Ausgrid's distribution network. We treat this as a positive revenue adjustment in establishing the 2019–20 ARR for Ausgrid's distribution network and we smooth

AER, Framework and approach Ausgrid, Endeavour Energy and Essential Energy Regulatory control period commencing 1 July 2019, July 2017, p. 13; NER, cl. 6.25(b).

This amount has been updated for actual 2017–18 revenue, which was still an estimate at the time of the remade decision. See AER, *Final decision, Ausgrid 2014–19 electricity distribution determination*, January 2019. p. 7.

The undertakings from Ausgrid addressed pricing uncertainties arising from limited merits and judicial review processes.

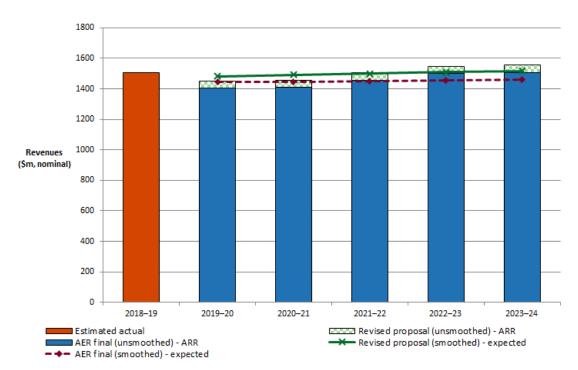
⁴ The AER made an 'Adjustment determination' for Ausgrid under clause 8A.14.5 of the NER.

- this out as part of setting the expected revenues over the 2019–24 regulatory control period.
- Comprised of our estimate of \$362.5 million to be removed from the total revenues for Ausgrid's transmission network. We treat this as a negative revenue adjustment in establishing the 2019–20 ARR for Ausgrid's distribution network and we smooth this out as part of setting the expected revenues over the 2019–24 regulatory control period.

We determine the annual expected revenue (smoothed) and X factor for each regulatory year of the 2019–24 regulatory control period by smoothing the ARR. Our final decision is to approve total expected revenues (smoothed) of \$7264.8 million and \$438.5 million (\$ nominal) for the 2019–24 regulatory control period for Ausgrid's distribution and transmission networks respectively.

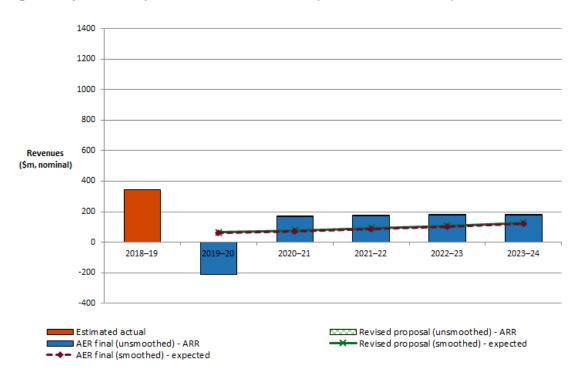
Figure 1.1 and Figure 1.2 show the difference between Ausgrid's revised proposal and our final decision. Table 1.1 and Table 1.2 set out our final decision on Ausgrid's annual building block costs, the ARR, annual expected revenue and X factor for each year of the 2019–24 regulatory control period for Ausgrid's distribution and transmission networks respectively.

Figure 1.1 AER's final decision on Ausgrid's revenue for the 2019–24 regulatory control period — distribution (\$million, nominal)



Source: Ausgrid, *Post Tax Revenue Model (PTRM) Distribution,* January 2019. AER analysis.

Figure 1.2 AER's final decision on Ausgrid's revenue for the 2019–24 regulatory control period – transmission (\$million, nominal)



Source: Ausgrid, *Post Tax Revenue Model (PTRM) Transmission,* January 2019. AER analysis.

Table 1.1 AER's final decision on Ausgrid's revenues for the 2019—24 regulatory control period – distribution (\$million, nominal)

	2019–20	2020–21	2021–22	2022–23	2023–24	Total
Return on capital	788.4	800.4	806.4	807.5	806.4	4009.1
Regulatory depreciation ^a	93.3	120.5	146.4	172.1	171.2	703.5
Operating expenditure ^b	436.9	447.9	460.5	473.5	486.7	2305.5
Revenue adjustments ^c	60.5	17.0	17.4	17.8	18.3	131.0
Net tax allowance	27.4	22.7	25.7	28.0	25.0	128.8
Annual revenue requirement (unsmoothed)	1406.6	1408.5	1456.4	1498.9	1507.6	7278.0
Annual expected revenue (smoothed)	1446.8	1446.3	1451.7	1457.2	1462.8	7264.8
X factor ^d	n/a ^e	2.40%	2.00%	2.00%	2.00%	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 capital expenditure sharing scheme (CESS), demand management innovation mechanism (DMIAM) and an amount resulting from the remittal decision for the 2014–19 regulatory control period.
- (d) 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 2019–20 because we set the 2019–20 expected revenue in this decision. The expected revenue for 2019–20 is around 6.3 per cent lower than the expected revenue for 2018–19 in real terms or 4.0 per cent lower in nominal terms.

Table 1.2 AER's final decision on Ausgrid's revenues for the 2019–24 regulatory control period — transmission (\$million, nominal)

	2019–20	2020–21	2021–22	2022–23	2023–24	Total
Return on capital	108.8	110.0	110.7	110.1	110.5	550.1
Regulatory depreciation ^a	9.8	13.7	17.4	21.2	21.7	83.8
Operating expenditure ^b	36.7	37.6	38.6	39.7	40.8	193.3
Revenue adjustments ^c	-370.0	2.8	2.9	2.9	3.0	-358.5
Net tax allowance	1.0	0.7	0.7	1.3	1.2	4.9
Annual revenue requirement (unsmoothed)	-213.7 ^d	164.8	170.3	175.1	177.2	473.6
Annual expected revenue (smoothed)	59.1	70.8	84.9	101.7	121.9	438.5
X factor ^e	n/a ^f	-17.00%	-17.00%	-17.00%	-17.00%	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 capital expenditure sharing scheme (CESS) and an amount resulting from the remittal decision for the 2014–19 regulatory control period.
- (d) This negative ARR is due to the inclusion of a large negative revenue adjustment in 2019–20 arising from the remittal decision for the 2014–19 regulatory control period and will be smoothed out in setting the annual expected revenues.
- (e) 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) Ausgrid is not required to apply an X factor for 2019–20 because we set the 2019–20 expected revenue in this decision. The expected revenue for 2019–20 is around 83.2 per cent lower than the expected revenue for 2018–19 in real terms or 82.8 per cent lower in nominal terms.

1.2 Ausgrid's revised proposal

Ausgrid's revised proposal included a total expected revenue of \$7504.1 million and \$469.8 million (\$ nominal) for the 2019–24 regulatory control period for its distribution and transmission networks respectively. These amounts included (net negative) revenue adjustments for the outcome of the remittal decision for the 2014–19 regulatory control period.

Table 1.3 and Table 1.4 show Ausgrid's revised proposed building block costs, the ARR, expected revenue and X factor for each year of the 2019–24 regulatory control period for its distribution and transmission networks respectively.

Table 1.3 Ausgrid's revised proposed revenues for the 2019–24 regulatory control period – distribution (\$million, nominal)

	2019–20	2020–21	2021–22	2022–23	2023–24	Total
Return on capital	825.9	838.0	843.7	844.3	842.6	4194.5
Regulatory depreciation ^a	94.3	121.5	147.5	173.3	172.4	708.9
Operating expenditure ^b	436.9	447.9	460.5	473.5	486.7	2305.5
Revenue adjustments ^c	58.9	17.0	17.4	17.9	18.3	129.6
Net tax allowance	33.0	31.5	36.3	39.7	37.3	177.9
Annual revenue requirement (unsmoothed)	1449.0	1455.9	1505.4	1548.6	1557.4	7516.3
Annual expected revenue (smoothed)	1483.5	1492.1	1500.8	1509.5	1518.3	7504.1
X factor	n/a ^d	1.80%	1.80%	1.80%	1.80%	n/a

Source: Ausgrid, Attachment 4.02 – PTRM for distribution, January 2019.

- (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 CESS, DMIAM, shared assets and an amount resulting from the remittal decision for the 2014–19 regulatory control period.
- (d) Ausgrid is not required to apply an X factor for 2019–20 because we set the 2019–20 expected revenue in this decision.

Table 1.4 Ausgrid's revised proposed revenues for the 2019–24 regulatory control period – transmission (\$million, nominal)

	2019–20	2020–21	2021–22	2022–23	2023–24	Total
Return on capital	114.2	115.3	116.0	115.3	115.6	576.4
Regulatory depreciation ^a	9.8	13.7	17.4	21.2	21.8	83.9
Operating expenditure ^b	36.7	37.6	38.6	39.7	40.8	193.3
Revenue adjustments ^c	-369.8	2.8	2.9	2.9	3.0	-358.2
Net tax allowance	1.8	1.9	2.2	2.8	2.8	11.5
Annual revenue requirement (unsmoothed)	-207.4	171.3	177.0	181.9	184.0	506.9
Annual expected revenue (smoothed)	65.9	77.7	91.5	107.8	126.9	469.8
X factor	n/a ^d	-15.00%	-15.00%	-15.00%	-15.00%	n/a

Source: Ausgrid, Attachment 4.05 – PTRM for transmission, January 2019.

- (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 CESS and an amount resulting from the remittal decision for the 2014–19 regulatory control period.
- (d) Ausgrid is not required to apply an X factor for 2019–20 because we set the 2019–20 expected revenue in this decision.

1.3 Assessment approach

We did not change our assessment approach for the ARR from our draft decision. Section 1.3 of our draft decision details that approach.⁵

1.4 Reasons for final decision

For this final decision, we determine a total ARR of \$7278.0 million and \$473.6 million (\$ nominal) for Ausgrid over the 2019–24 regulatory control period for its distribution and transmission networks respectively. This is a reduction of \$238.4 million (\$ nominal) or 3.2 per cent to Ausgrid's revised proposal for its distribution network and \$33.2 million (\$ nominal) or 6.6 per cent to Ausgrid's revised proposal for its transmission network. This reflects the impact of our final decision on the various building block costs.

Figure 1.3 and Figure 1.4 show the building block components from our final determination that make up the ARR for Ausgrid, and the corresponding components from its revised proposal and our draft decision for Ausgrid's distribution and transmission networks respectively.

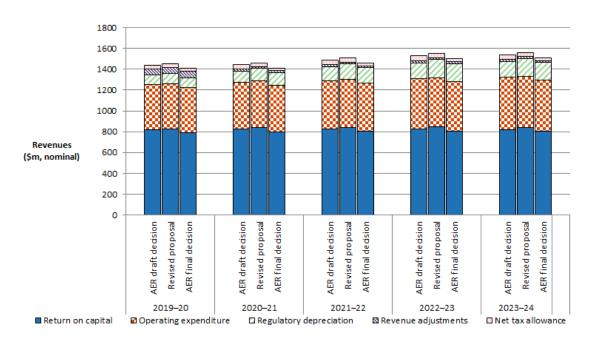
The changes we made to Ausgrid's revised proposed building blocks for its combined distribution and transmission networks include (in nominal terms):

- a reduction in the return on capital allowance of \$211.7 million or 4.4 per cent (attachments 2 and 5 and section 2.2 of the overview)
- a reduction in the regulatory depreciation allowance of \$5.5 million or 0.7 per cent (attachments 2, 4 and 5)
- a reduction in the cost of corporate income tax allowance of \$55.6 million or 29.4 per cent (attachment 7 and section 2.2 of the overview)
- an increase in revenue adjustments of \$1.2 million, due to the removal of a shared asset decrement (section 1.4.2). Updates to the adjustment for the remittal decision for the 2014–19 regulatory control period, 6 changes to CESS (attachment 9) and DMIAM (sections 2.7 and 3.4 of the overview) did not have a material impact on the revenue adjustments.

AER, Ausgrid Draft Decision, Attachment 1 - Annual revenue requirement, pp. 12-13, November 2018.

Our final decision 2019–24 PTRMs for Ausgrid's distribution and transmission networks contain an updated revenue adjustment net total amount of -\$319.8 million (\$2018-19) in 2019-20 to account for the outcome of the remittal decision for the 2014-19 regulatory control period. This adjustment reflects the outcome of the remittal process for the 2014–19 regulatory control period and incorporates updates to 2017–18 revenue with actual rather than estimated revenues.

Figure 1.3 AER's final decision and Ausgrid's revised proposed annual revenue requirement — distribution (\$million, nominal)



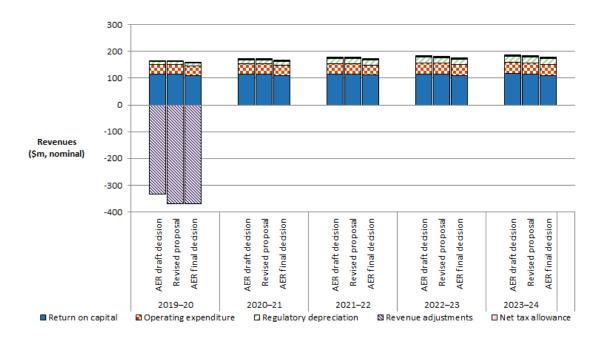
Source: Ausgrid, Attachment 4.02 – PTRM for distribution, January 2019.

AER analysis.

Note: Revenue adjustments include CESS, DMIAM and an amount for the remittal process for the 2014-19

regulatory control period. Opex includes debt raising costs.

Figure 1.4 AER's final decision and Ausgrid's revised proposed annual revenue requirement — transmission (\$million, nominal)



Source: Ausgrid, Attachment 4.05 - PTRM for transmission, January 2019.

AER analysis.

Note: Revenue adjustments include CESS and an amount for the remittal process for the 2014-19 regulatory

control period. Opex includes debt raising costs.

1.4.1 Revenue smoothing

We have taken into account the building block costs determined in this decision when smoothing the expected revenues for Ausgrid over the 2019-24 regulatory control period. In doing so, we set the expected revenues for the first regulatory year (2019-20) at \$1446.8 million and \$59.1 million (\$ nominal) for Ausgrid's distribution and transmission networks respectively. These are higher than the 2019-20 ARRs (unsmoothed) of \$1406.6 million and -\$213.7 million⁷ we determined for Ausgrid's distribution and transmission networks respectively. We then applied a profile of X factors to determine the expected revenue in subsequent years.

For Ausgrid's distribution network, we have applied a profile of X factors that gradually decreases from the second regulatory year (2020-21) onwards to smooth the revenue movements. This allows for a relatively predictive price movement over the regulatory control period, and provides a stable trend moving forward. This approach smooths the

This negative ARR is due to the inclusion of a large negative revenue adjustment in 2019-20 arising from the outcome of the remittal decision for the 2014-19 regulatory control period.

revenues by allowing for lower revenues over 2019–21, followed by small increases to the revenue at a rate below expected inflation for the remaining three years of the 2019–24 regulatory control period.

Based on the X factors we have determined for Ausgrid's distribution network, the differences between the expected revenue and ARR for 2023–24 is 3.0 per cent. The divergence is within our target band of 3 per cent. Therefore, we consider that our profile of X factors results in an expected revenue in the last year of the regulatory control period that is as close as reasonably possible to the ARR for that year.⁸

For Ausgrid's transmission network, the revenue smoothing profile has been significantly affected by the large negative revenue adjustment resulting from the remittal decision for the 2014–19 regulatory control period. Consistent with our draft decision and Ausgrid's revised proposal, our approach for this final decision is to allow for a large drop in transmission expected revenue in the first regulatory year (2019–20) followed by a constant X factor over the entire length of the period to bring the expected revenue in the final regulatory year (2023–24) to be closer to the ARR for that year. As a result, the expected revenues from the second regulatory year (2020–21) onwards are well below the respective ARRs for the 2019–24 regulatory control period. Our final decision smoothing profile results in a difference between the expected revenue and ARR for 2023–24 of around 31.2 per cent. Given the novel circumstances affecting the revenue smoothing for Ausgrid's transmission network, we consider it is reasonable to allow this difference to diverge more than usual.

1.4.2 Shared assets

Our final decision is not to apply a shared asset revenue adjustment to Ausgrid's total revenue requirement because the materiality threshold is not met in any year of the 2019–24 regulatory control period.

Distributors, such as Ausgrid, may use assets to provide both the standard control services we regulate and other unregulated services. These assets are called 'shared assets'. ⁹ If the revenue from shared assets is material, ten per cent of the unregulated revenues that a distributor earns from shared assets will be used to reduce the distributor's revenue for standard control services. ¹⁰

The shared asset principles establish that use of share assets should be material before cost reductions are applied. ¹¹ The 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

NER, cl. 6.5.9(b)(2). We consider a divergence of up to 3 per cent between the expected ARR and annual building block revenue requirement for the last year of the regulatory control period is appropriate, if this can achieve smoother price changes for users over the regulatory control period.

⁹ NER, cl. 6.4.4.

¹⁰ AER, *Shared asset guideline*, November 2013, p. 15.

¹¹ NER, cl. 6.4.4(c)(3).

annual average unregulated revenue from shared assets is expected to be greater than one per cent of its expected revenue for that regulatory year.¹²

In our draft decision, we did not apply a shared asset revenue adjustment to Ausgrid's total revenue requirement as the materiality threshold of one per cent was not expected to be met in any year of the 2019–24 regulatory control period.¹³

Ausgrid's revised proposal distribution network PTRM included a shared assets revenue adjustment (in 2019–20) to its total revenue requirement for the 2019–24 regulatory control period. This was because of its assessment that the materiality threshold was expected to be met for that year.

We consider Ausgrid's forecast unregulated revenues from shared assets for the 2019–24 regulatory control period to be reasonable because they are comparable with its historical unregulated revenues from shared assets. Based on the expected revenues determined in this final decision, we estimate that the unregulated revenues will be between 0.84 and 0.88 per cent of Ausgrid's expected revenues in each year of the 2019–24 regulatory control period. Therefore, the materiality threshold of one per cent is not met in any year of the 2019–24 regulatory control period and we do not apply a shared asset revenue adjustment.

We note unregulated revenues from shared assets may in future become material. We will monitor Ausgrid's shared asset unregulated revenues for future regulatory control periods.

1.4.3 Indicative average distribution price impact

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

We regulate Ausgrid's standard control services for its distribution and transmission networks under a revenue cap form of control. This means our final decision on Ausgrid's expected revenues does not directly translate to price impacts. This is because Ausgrid's revenue is fixed under the 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 regulatory control period. In each assessment we will administer the pricing requirements set in in this distribution determination.

¹² AER, Shared asset guideline, November 2013, p. 8.

AER, Ausgrid Draft Decision, Attachment 1 - Annual revenue requirement, November 2018 p. 18.

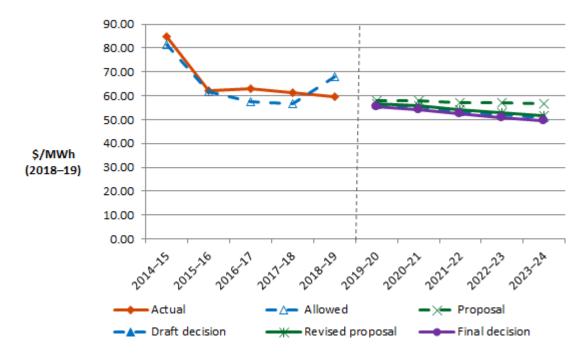
¹⁴ This percentage is based on the combined revenues for the distribution and transmission networks.

For Ausgrid's transmission networks, 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 TNSP for this network region, establishes transmission charges and then provides Ausgrid with its portion of revenues.

For this final decision, we have estimated some indicative average distribution and transmission price impacts flowing from our final determination on the expected revenues for Ausgrid over the 2019-24 regulatory control period. In this section, our estimates only relate to standard control services (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 2019–24 regulatory control period matches Ausgrid's forecast energy consumption, which we have adopted for this final decision.

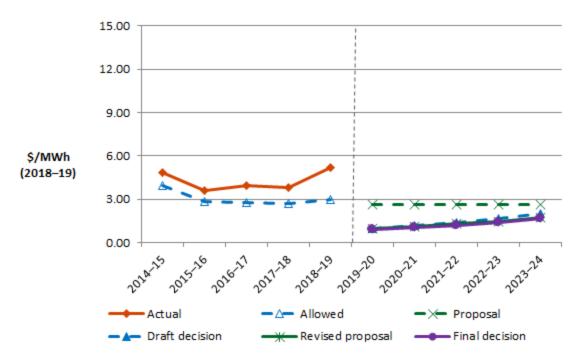
Figure 1.5 and Figure 1.6 show Ausgrid's indicative average price path over the period 2014–15 to 2023–24 in real 2018–19 dollar terms based on the expected revenues established in our final decision compared to Ausgrid's revised proposed revenue requirement for its distribution and transmission networks respectively.

Figure 1.5 Indicative price path for Ausgrid – distribution (\$/MWh, 2018–19)



Source: AER analysis.

Figure 1.6 Indicative price path for Ausgrid – transmission (\$/MWh, 2018-19)



Source: AER analysis.

Notes: The price path plots for the transmission network are based on actual and forecast energy throughput amounts for TransGrid's transmission network across NSW. This reflects that Ausgrid's transmission

network is a small, embedded component of the broader TransGrid transmission network.

We estimate that our final decision on Ausgrid's annual expected revenue will result in decreases to average network charges of about 3.5 per cent and 20.6 per cent per annum over the 2019-24 regulatory control period in real 2018-19 dollar terms for its distribution and transmission networks respectively. 15 This compares to the real average decreases of approximately 2.8 per cent and 20.0 per cent per annum in Ausgrid's revised proposal for the 2019–24 regulatory control period for its distribution and transmission networks respectively. 16

These high-level estimates reflect the aggregate change across the entire network and do not reflect the particular tariff components for specific end users.

In nominal terms we estimate Ausgrid's average distribution network charges would decrease by 1.2 per cent per annum and 18.7 per cent per annum for Ausgrid's distribution and transmission networks respectively. These amounts reflect an expected inflation rate of 2.42 per cent per annum as determined in this final decision.

In nominal terms we estimate that Ausgrid's revised proposal would result in a 0.5 per cent per annum decrease and 18.1 per cent per annum decrease for its distribution and transmission networks respectively. These amounts reflect an expected inflation rate of 2.42 per cent per annum as proposed by Ausgrid in its revised proposal.

Table 1.5 and Table 1.6 display in nominal terms the comparison of the revenue and price impacts of Ausgrid's revised proposal and our final decision for the distribution and transmission networks respectively.

Table 1.5 Comparison of revenue and price impacts of Ausgrid's revised proposal and the AER's final decision – distribution (\$nominal)

	2018–19	2019–20	2020–21	2021–22	2022–23	2023–24
AER final decision						
Revenue (\$m, nominal)	1507.5	1446.8	1446.3	1451.7	1457.2	1462.8
Price path (\$, nominal/MWh) ^a	59.42	56.69	56.70	56.18	56.08	55.93
Revenue (change %)		-4.0%	-0.0%	0.4%	0.4%	0.4%
Price path (change %)		-4.6%	0.0%	-0.9%	-0.2%	-0.3%
Ausgrid revised proposal						
Revenue (\$m, nominal)	1507.5	1483.5	1492.1	1500.8	1509.5	1518.3
Price path (\$, nominal/MWh) ^a	59.42	58.12	58.49	58.08	58.09	58.06
Revenue (change %)		-1.6%	0.6%	0.6%	0.6%	0.6%
Price path (change %)		-2.2%	0.6%	-0.7%	0.0%	-0.1%

Source: AER analysis.

⁽a) The price path is in nominal terms and is constructed by dividing nominal expected revenue for standard control services by forecast energy consumption for each year of the regulatory control period.

Table 1.6 Comparison of revenue and price impacts of Ausgrid's revised proposal and the AER's final decision - transmission (\$nominal)

	2018–19	2019–20	2020–21	2021–22	2022–23	2023–24
AER final decision						
Revenue (\$m, nominal)	344.5	59.1	70.8	84.9	101.7	121.9
Price path (\$, nominal/MWh) ^a	5.16	0.89	1.07	1.27	1.54	1.83
Revenue (change %)		-82.8%	19.8%	19.8%	19.8%	19.8%
Price path (change %)		-82.8%	19.7%	19.6%	20.6%	19.3%
Ausgrid revised proposal						
Revenue (\$m, nominal)	344.5	65.9	77.7	91.5	107.8	126.9
Price path (\$, nominal/MWh) ^a	5.16	0.99	1.17	1.37	1.63	1.91
Revenue (change %)		-80.9%	17.8%	17.8%	17.8%	17.8%
Price path (change %)		-80.8%	17.7%	17.5%	18.5%	17.3%

Source: AER analysis.

1.4.4 Expected impact of decision on electricity bills

The annual electricity bill for customers in Ausgrid's network area will reflect the combined cost of all the electricity supply chain components—wholesale energy generation, transmission, distribution, metering, and retail costs. Our analysis is based on our calculation of Ausgrid's:

- distribution network charges, which are forecast to represent about 34.5 per cent of the average Ausgrid customer retail bill in 2018–19¹⁷
- transmission network charges, which are forecast to represent an average of about 2.0 per cent of the average Ausgrid customer retail bill in 2018–19¹⁸

We estimate the expected bill impact by varying the distribution and transmission networks charges in accordance with our final decision, while holding all other components—including the metering component—constant. This approach isolates the effect of our final decision on the core distribution and transmission network charges,

⁽a) The price path is in nominal terms and is constructed by dividing nominal expected revenue for standard control services by forecast energy consumption for each year of the regulatory control period.

AEMC Residential electricity price trends report 2018 - New South Wales, December 2018 p 71.

The AEMC's Residential electricity price trends report 2018 - New South Wales lists a transmission bill proportion of 10.3 per cent for NSW customers and this is based on total transmission revenue collected across NSW/ACT (TransGrid, Ausgrid, Directlink and Ausgrid). Our adopted bill proportion percentage for Ausgrid's transmission network charges is the approved 2018-19 forecast transmission network revenue for Ausgrid divided by the total forecast 2018–19 transmission revenue for NSW/ACT multiplied by the AEMC's transmission bill proportion of 10.3 per cent. AEMC Residential electricity price trends report 2018 - New South Wales, December 2018 p 71.

and does not imply that other components will remain unchanged across the regulatory control period.¹⁹

Based on this approach, we expect that our final decision will decrease the average annual electricity bills for residential customers in Ausgrid's network.

The network component of the average annual residential electricity bill in 2023–24 is expected to decrease by about \$67 (\$ nominal) from the 2018–19 level. This equates to a 3.3 per cent decrease in the average customer's total bill over five years.

By comparison, had we accepted Ausgrid's revised proposal, the expected network component of the average annual residential electricity bill in 2023–24 would decrease by about \$41 (\$ nominal) from the 2018–19 level. This equates to a 2.1 per cent decrease in the average customer's total bill over five years.

Similarly, we expect that our final decision will decrease the average annual electricity bills for an average small business customer in Ausgrid's network. The network component of the average annual small business electricity bill in 2023–24 is expected to decrease by about \$156 (\$ nominal) from the 2018–19 level. This equates to a 3.3 per cent decrease in the average customer's total bill over five years.

By comparison, had we accepted Ausgrid's revised proposal, the expected network component of the average annual small business electricity bill in 2023–24 would decrease by about \$97 (\$ nominal) from the 2018–19 level. This equates to a 2.1 per cent decrease in the average customer's total bill over five years.

Our estimate of the potential impact our final decision will have for Ausgrid's residential and small business customers is based on an average annual electricity usage of around 5000 kWh per annum for residential households and 10000 kWh for small businesses in Ausgrid's network.²⁰ Therefore, customers with different usage will experience different changes in their bills. We also note that there are other factors, such as metering costs, other transmission network costs, wholesale and retail costs, which affect electricity bills.

Table 1.7 shows the estimated annual average impact of our final decision for the 2019–24 regulatory control period and Ausgrid's revised proposal on the average residential and small business customers' annual electricity bills in its network. As explained above, these bill impact estimates are indicative only, and individual customers' actual bills will depend on their usage pattern and the structure of their tariffs.

It also assumes that actual energy consumption will equal the forecast adopted in our final decision. Since Ausgrid operates under a revenue cap, changes in energy consumption will also affect annual electricity bills across the 2019–24 regulatory control period.

²⁰ Ausgrid, 11.3 – RIN – Consolidated, April 2018.

Table 1.7 Estimated impact of Ausgrid's revised proposal and the AER's final decision on average annual electricity bills for the 2019-24 regulatory control period (\$ nominal)

	2018–19	2019–20	2020–21	2021–22	2022–23	2023–24
AER final decision						
Residential annual billa	2013ª	1948	1949	1945	1946	1946
Annual change ^c		-65 (-3.3%)	1 (0.1%)	-4 (-0.2%)	1 (0%)	1 (0%)
Small business annual bill ^b	4687 ^b	4534	4538	4528	4530	4531
Annual change ^c		-152 (-3.3%)	3 (0.1%)	-10 (-0.2%)	2 (0%)	1 (0%)
Ausgrid revised proposal						
Residential annual billa	2013ª	1965	1971	1968	1970	1972
Annual change ^c		-48 (-2.4%)	6 (0.3%)	-3 (-0.2%)	2 (0.1%)	2 (0.1%)
Small business annual bill ^b	4687 ^b	4575	4589	4581	4586	4590
Annual change ^c		-111 (-2.4%)	13 (0.3%)	-7 (-0.2%)	5 (0.1%)	4 (0.1%)

AER analysis; AER, Energy Made Easy website (standing offer); Ausgrid, 11.3 - RIN - Consolidated, April 2018; AEMC Residential electricity price trends report 2018 - New South Wales, December 2018.

- (a) Annual bill for 2018-19 is sourced from Energy Made Easy and reflects the average consumption of 5000 kWh for residential customers in NSW (postcode 2000).
- Annual bill for 2018-19 is sourced from Energy Made Easy and reflects the average consumption of 10000 (b) kWh for small business customers in NSW (postcode 2000).
- Annual change amounts and percentages are indicative. They are derived by varying the networks (c) components of the 2018-19 bill amounts in proportion to yearly expected revenue divided by AEMO's forecast energy delivered for NSW for transmission and forecast energy for distribution as proposed by Ausgrid. Actual bill impacts will vary depending on electricity consumption and tariff class.