Final decision

Transgrid transmission determination
1 July 2023 to 30 June 2028

Attachment 1 – Maximum allowed revenue

April 2023

AUSTRALIAN
ENERGY
REGULATOR

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Contents

1 Maximum allowed revenue

This attachment sets out our final decision on Transgrid's maximum allowed revenue (MAR) for the provision of prescribed transmission services over the 2023–28 regulatory control period (2023–28 period). Specifically, we set out our final decision on:[1]

- the estimated total revenue cap, which is the sum of the annual expected MAR
- the annual building block revenue requirement
- the annual expected MAR
- the X factor.

We determine Transgrid's annual building block revenue requirement using a building block approach. We determine the X factors by smoothing the annual building block revenue requirement over the regulatory control period. The X factor is used in the CPI–X methodology to determine the annual expected MAR (smoothed).

1.1 Final decision

We determine a total annual building block revenue requirement for Transgrid of $4,865.0 million ($ nominal, unsmoothed) for the 2023–28 period. This is a decrease of $154.7 million (3.1%) to Transgrid’s revised proposal. This is largely driven by our final decision approving a lower return on capital, operating expenditure (opex) and revenue adjustments building block, which are $28.1 million, $95.4 million and $34.9 million lower than Transgrid’s revised proposal, respectively.

We determine the annual expected MAR and X factor for each regulatory year of the 2023−28 period by smoothing the annual building block revenue requirement. Our final decision is to approve an estimated total revenue cap of $4,851.3 million ($ nominal) for Transgrid for the 2023–28 period. Our approved X factor for 2024–25 is 2.20%, followed by X factors of –0.68% per annum over the remaining years of 2025–26 to 2027–28.[2]

sets out our final decision on Transgrid’s annual building block revenue requirement, the X factor, the annual expected MAR and the estimated total revenue cap for the 2023–28

[1] NER, cll. 6A.4.2(a) (1)-(3), 6A.5.3(c), 6A.5.4 and 6A.6.8.

[2] Transgrid is not required to apply an X factor for 2023–24 because we set the 2023–24 MAR in this decision.

period.

Table 1.1 AER's final decision on Transgrid's annual building block revenue requirement, annual expected MAR, estimated total revenue cap and X factor ($million, nominal)

	2023–24	2024–25	2025–26	2026–27	2027–28	Total
Return on capital	508.4	570.3	603.7	617.6	633.1	2,933.0
Regulatory depreciation[a]	98.4	111.7	144.0	172.6	162.9	689.6
Operating expenditure[b]	212.4	234.9	243.4	251.5	259.9	1,202.2
Revenue adjustments[c]	6.4	–9.5	–20.6	–20.2	–27.6	–71.5
Net tax amount	23.4	21.1	17.4	23.6	26.1	111.6
Annual building block revenue requirement (unsmoothed)	849.0	928.6	988.0	1,045.0	1,054.4	4,865.0
Annual expected MAR (smoothed)	**924.0**	**930.0**	**963.7**	**998.7**	**1,034.9**	**4,851.3**[d]
X factors[e]	n/a[f]	2.20%	–0.68%	–0.68%	–0.68%	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 assets decrement and the demand management innovation allowance mechanism (DMIAM).

(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) Transgrid is not required to apply an X factor for 2023–24 because we set the 2023–24 MAR in this decision. The MAR for 2023–24 is equal to the MAR for 2022–23 in real terms, or 2.9% higher in nominal terms.

1.2 Transgrid's revised proposal

Transgrid's revised proposal included a total (smoothed) revenue cap of $5,005.0 million ($ nominal) for the 2023–28 period. Table 0.2 sets out Transgrid's revised proposed annual building block revenue requirement, the X factor, the annual expected MAR and the estimated total revenue cap.

Table 0.2 Transgrid's revised proposed annual building block revenue requirement, annual expected MAR, estimated total revenue cap and X factor ($million, nominal)

	2023–24	2024–25	2025–26	2026–27	2027–28	Total
Return on capital	508.8	571.0	608.0	625.7	647.6	2,961.2
Regulatory depreciation[a]	91.6	104.8	147.1	182.5	171.6	697.5
Operating expenditure[b]	226.2	251.0	263.0	273.4	283.9	1,297.6
Revenue adjustments[c]	12.7	–2.9	–13.8	–13.3	–19.2	–36.6
Net tax amount	21.5	19.2	14.2	20.6	24.7	100.0
Annual building block revenue requirement (unsmoothed)	860.8	943.0	1,018.5	1,088.9	1,108.6	5,019.8
Annual expected MAR (smoothed)	**940.5**	**946.5**	**991.5**	**1,038.6**	**1,088.0**	**5,005.0**[d]
X factors[e]	n/a[f]	2.29%	–1.71%	–1.71%	–1.71%	n/a

Source: Transgrid, 2023–28 *Revised Revenue Proposal, Post Tax Revenue Model*, December 2022.

(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 assets adjustment and DMIAM.

(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) Transgrid is not required to apply an X factor for 2023–24 because we set the 2023–24 MAR in this decision.

1.3 Assessment approach

We did not change the building block approach we use to determine the expected MAR from our draft decision. Attachment 1 (sections 1.3.1 and 1.3.2) of our draft decision details that approach.[3]

1.3.1 Annual revenue adjustment process

We use an expected inflation rate in our post-tax revenue model (PTRM) to calculate the expected MAR (as shown in

) in nominal dollar terms. The calculation of the actual MAR will therefore require an adjustment for actual inflation. To this end, the actual MAR from the second year onwards is adjusted for actual inflation. As discussed in the *Rate of Return Instrument*, the MAR is also subject to adjustment to reflect our update of Transgrid's return on debt annually.[4] This means the actual MAR from the second year onwards will also be adjusted for revised X factors after the annual return on debt update. This annual revenue adjustment process is set out below.

To enable the formula for the annual revenue adjustment process to operate correctly, we will refer to the expected MAR determined in this decision using the building block costs as the allowed revenue (AR). This is because the expected MAR determined using the building block costs does not incorporate performance incentive scheme revenue adjustments and pass through amounts that may apply to each regulatory year.

We determine the 2023–24 AR of $924.0 million for Transgrid. Transgrid then applies an annual adjustment to determine its AR for each subsequent year of the 2023–28 period, based on the previous year's AR and using the CPI–X methodology.[5] That is, the subsequent year's allowed revenue is determined by adjusting the previous year's AR for actual inflation and the X factor determined after the annual return on debt update:

$$\mathrm{AR}_t = \mathrm{AR}_{t-1} \times (1 + \Delta\mathrm{CPI}) \times (1 - \mathrm{X}_t)$$

where:

AR = the allowed revenue

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[3] AER, *Draft decision, Transgrid Transmission Determination 2023 to 2028, Attachment 1 Maximum allowed revenue*, September 2022, pp. 3–6.

[4] AER, *Rate of Return Instrument*, February 2023, cl. 24, Note 29.

[5] In the case of making the annual adjustment for year 2, the previous year's AR would be the same as the approved expected MAR for year 1 as contained in the PTRM.

t	=	time period/financial year (for *t* = 2 (2024–25), 3 (2025–26), 4 (2026–27), 5 (2027–28))
$\Delta\mathrm{CPI}$	=	the annual percentage change in the ABS Consumer price index all groups, weighted average of eight capital cities from December in year *t* – 2 to December in year *t* – 1
X	=	the smoothing factor determined in accordance with the PTRM as approved in the AER's final decision, and annually revised for the return on debt update in accordance with the formula specified in the *Rate of return instrument* calculated for the relevant year.[6]

The MAR used for transmission pricing is determined annually as part of the annual revenue adjustment process in accordance with the National Electricity Rules (NER). The MAR is determined each year by adding to (or deducting from) the allowed revenue:

- the service target performance incentive scheme revenue increment (or revenue decrement)[7]
- any approved pass through amounts.[8]

The annual MAR is established according to the following formula:

$$\mathrm{MAR}_t = \text{(allowed revenue)} + \text{(performance incentive)} + \text{(pass through)}$$

$$= \mathrm{AR}_t + \left(\left(\mathrm{AR}_{t-2} \times \frac{1}{2}\right) + \left(\mathrm{AR}_{t-1} \times \frac{1}{2}\right)\right) \times \mathrm{S}_{ct} + \mathrm{P}_t$$

where:

MAR	=	the maximum allowed revenue
AR	=	the allowed revenue
S	=	the percentage revenue increment or decrement determined in accordance with the service target performance incentive scheme
P	=	the pass through amount (positive or negative) that the AER has determined in accordance with clauses 6A.7.2 and 6A.7.3 of the NER
t	=	time period/financial year (for *t* = 2 (2024–25), 3 (2025–26), 4 (2026–27), 5 (2027–28))

6 AER, *Rate of Return Instrument*, February 2023, cl. 9.

7 NER, cl. 6A.7.4.

8 NER, cll. 6A.7.2 and 6A.7.3.

ct = time period/calendar year (for *ct* = 2 (2023), 3 (2024), 4 (2025), 5 (2026)).

Transgrid may also adjust the MAR for under- or over-recovery amounts.[9] That is, if the revenue amounts earned from providing prescribed transmission services in previous regulatory years are higher or lower than the sum of the approved MAR for those years, the difference can be included in the subsequent year's MAR. In the case of an under-recovery, the amount is added to the subsequent year's MAR. In the case of an over-recovery, the amount is subtracted from the subsequent year's MAR.

Table 0.3 sets out the timing of the annual calculation of the AR and performance incentive.

Table 0.3 Timing of the calculation of allowed revenues and the performance incentive for Transgrid

t	Allowed revenue (financial year)	*ct*	Performance incentive (calendar year)
2	1 July 2024 – 30 June 2025	2	1 January 2023 – 31 December 2023
3	1 July 2025 – 30 June 2026	3	1 January 2024 – 31 December 2024
4	1 July 2026 – 30 June 2027	4	1 January 2025 – 31 December 2025
5	1 July 2027 – 30 June 2028	5	1 January 2026 – 31 December 2026

Note: The performance incentive for the period 1 January 2022 to 31 December 2022 is to be applied to the AR determined for 2023–24 (AR_1).

1.4 Reasons for final decision

For this final decision, we determine a total annual building block revenue requirement of $4,865.0 million ($ nominal) for Transgrid for the 2023–28 period. This is a decrease of $154.7 million (3.1%) to Transgrid's revised proposed total annual building block revenue requirement of $5,019.8 million for this period. This reflects the impact of our final decision on the various building block costs.

Figure 0.1 shows the building block components from our final decision that make up the annual building block revenue requirement for Transgrid, and the corresponding components from its revised proposal and our draft decision. The changes made to Transgrid's revised proposal ($ nominal) include:

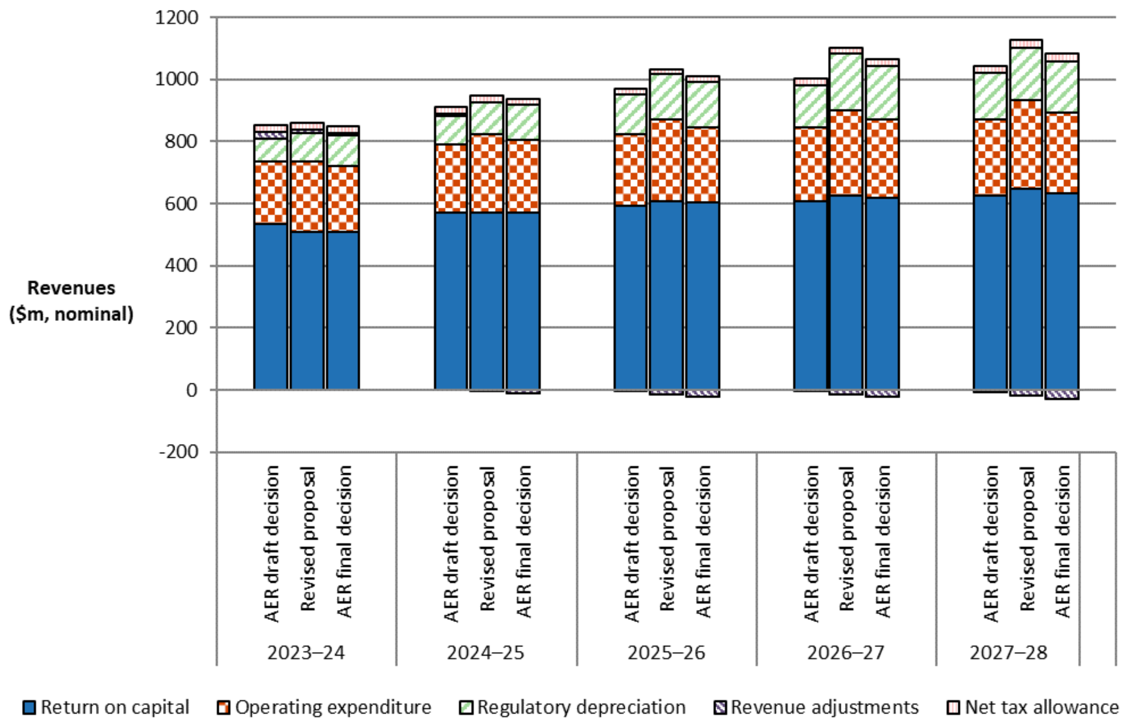
- a decrease in the return on capital of $28.1 million (1.0%). This is driven by our lower rate of return and lower net capex (Attachments 2, 3, 5).[10]

[9] NER, cl. 6A.23.3(e)(5).

[10] Our final decision determines a lower average rate of return over the 2023–28 period and lower as-incurred capex.

- a decrease in the regulatory depreciation of $7.9 million (1.1%). This is driven by a lower straight-line depreciation compared to Transgrid's revised proposal due to lower net capex in the final decision (Attachment 4).[11]
- A decrease in forecast opex of $95.4 million (7.3%). This is driven primarily by removal of the proposed System Security Roadmap project step change, reductions to Transgrid's proposed step change for cyber and critical infrastructure security, and updated labour price and productivity growth inputs (Attachment 6).
- a decrease in revenue adjustments of $34.9 million (95.3%). This is driven primarily by a larger capital expenditure sharing scheme (CESS) penalty compared to the revised proposal (Attachment 9).
- an increase in the cost of corporate income tax of $11.5 million (11.5%). This is driven primarily by a lower tax depreciation (Attachment 7).[12]

Figure 0.1 AER's draft and final decisions, and Transgrid's revised proposed annual building block revenue requirement ($ million, nominal)



Source: Transgrid, *2023-28 Revised Revenue Proposal, Post Tax Revenue Model*, December 2022; AER analysis.

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11 The regulatory depreciation amount is the net total of the straight-line depreciation, less the inflation indexation of the RAB. Our final decision applies a lower indexation component due to applying a lower expected inflation rate of 2.92% per annum compared with Transgrid's revised proposal of 3.00% per annum. However, the lower indexation component has been more than offset by the lower straight-line depreciation.

12 The lower tax depreciation is driven by a lower forecast as-commissioned capex in our final decision compared to Transgrid's revised proposal. All else being equal, a lower tax depreciation increases the cost of corporate income tax as it is a component of the tax expense.

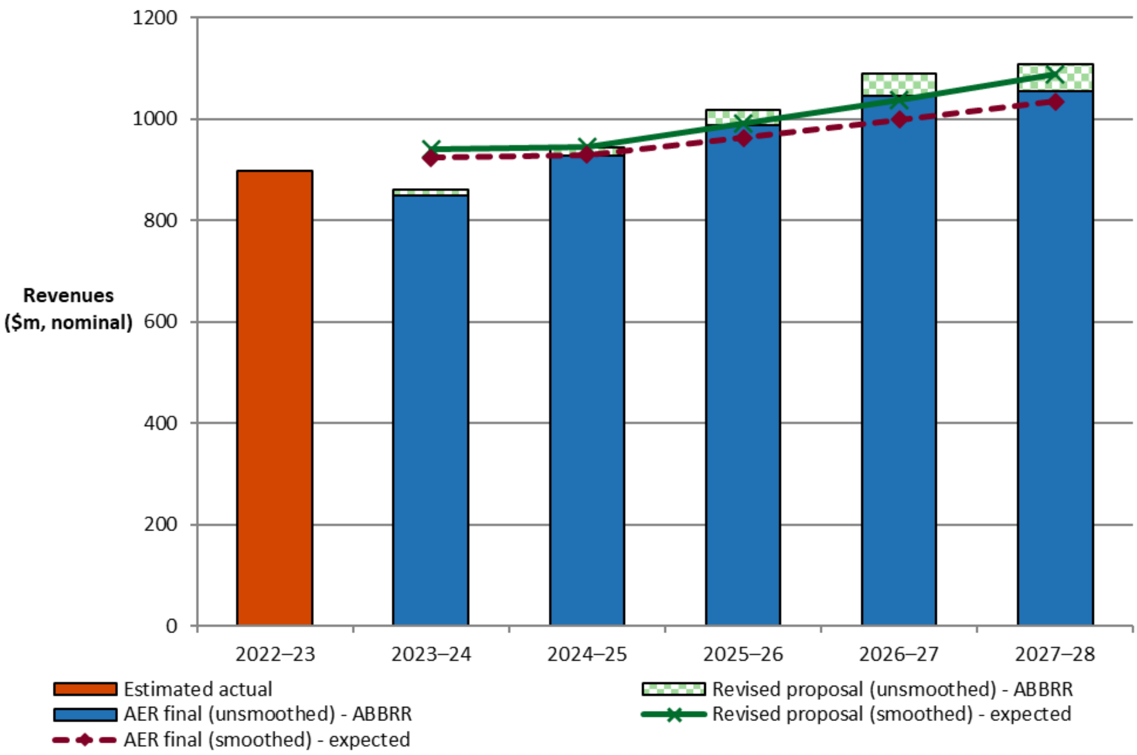
Note: Revenue adjustments include EBSS, CESS, shared assets adjustment and DMIAM amounts. Opex includes debt raising costs.

1.4.1 X factor, annual expected MAR and estimated total revenue cap

For this final decision, we determine an X factor for Transgrid of 2.20% for 2024–25 and followed by X factors of –0.68% per annum over the remaining years of 2025–26 to 2027−28.[13] The net present value (NPV) of the annual building block revenue requirement is $4,095.5 million ($ nominal) as at 1 July 2023. Based on this NPV and applying the CPI–X method, we determine that the annual expected MAR (smoothed) for Transgrid is $924.0 million in 2023–24 increasing to $1,034.9 million in 2027–28 ($ nominal). The resulting estimated total revenue cap for Transgrid is $4,851.3 million for the 2023–28 period.

Figure 0.2 shows our final decision on Transgrid's annual expected MAR (smoothed revenue) and the annual building block revenue requirement (unsmoothed revenue) for the 2023–28 period.

Figure 0.2 AER's final decision on Transgrid's revenue for the 2023–28 period ($million, nominal)



Source: AER analysis.

Note: Annual building block revenue requirement (ABBRR).

To determine the expected MAR for Transgrid, we have set the MAR for the first regulatory year at $924.0 million ($ nominal) which is $75.0 million higher than the annual building block revenue requirement in 2023–24. We then apply an expected inflation rate of 2.92% per

13 Transgrid is not required to apply an X factor for 2023–24 because we set the 2023–24 MAR in this decision.

annum and X factors of 2.20% in 2024–25 followed by –0.68% per annum for 2025–26 to 2027–28 to determine the expected MAR in subsequent years.[14] Consistent with our draft decision approach, the real decrease in the second year of the regulatory control period is to accommodate the incremental revenue Transgrid will recover as a result of our final decision on Transgrid's HumeLink stage 1 contingent project application.[15] Transgrid's revised proposal adopted our draft decision smoothing approach.[16]

We consider that our profile of X factors results in an expected MAR in the last year of the 2023–28 period that is as close as reasonably possible to the annual building block revenue requirement for that year.[17]

Our final decision results in an average increase of 2.9% per annum ($ nominal) in the expected MAR over the 2023–28 period.[18] This consists of an initial increase of 2.9% from 2022–23 to 2023–24, followed by an increase of 0.7% in 2024–25 and average annual increases of 3.6% during the remainder of the 2023–28 period.[19]

Our final decision also results in the average annual unsmoothed revenue to be 3.3% higher than that allowed in the 2018–23 period, in real terms ($2022–23). This is primarily because we have determined a higher return on capital amount in this final decision for the 2023–28 period than that approved in the 2018–23 determination.

Figure 0.3 compares our final and draft decision building blocks for Transgrid's 2023–28 period with Transgrid's proposed and revised proposed revenue requirement for the same period, and the approved revenue for the 2018–23 period.

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14 NER, cl. 6A.5.3(c)(3).

15 As discussed in our final decision for the HumeLink contingent project application, Transgrid's recovery of the incremental revenue for this contingent project commences in the second year of the 2023–28 period. As a result, by applying an X factor of 2.20% in year 2, we are able to smooth the anticipated increase in Transgrid's MAR due to the incremental revenue associated with HumeLink. AER, Determination – HumeLink, August 2022, p. 16; NER, cl. 6A.8.2(n)(1).

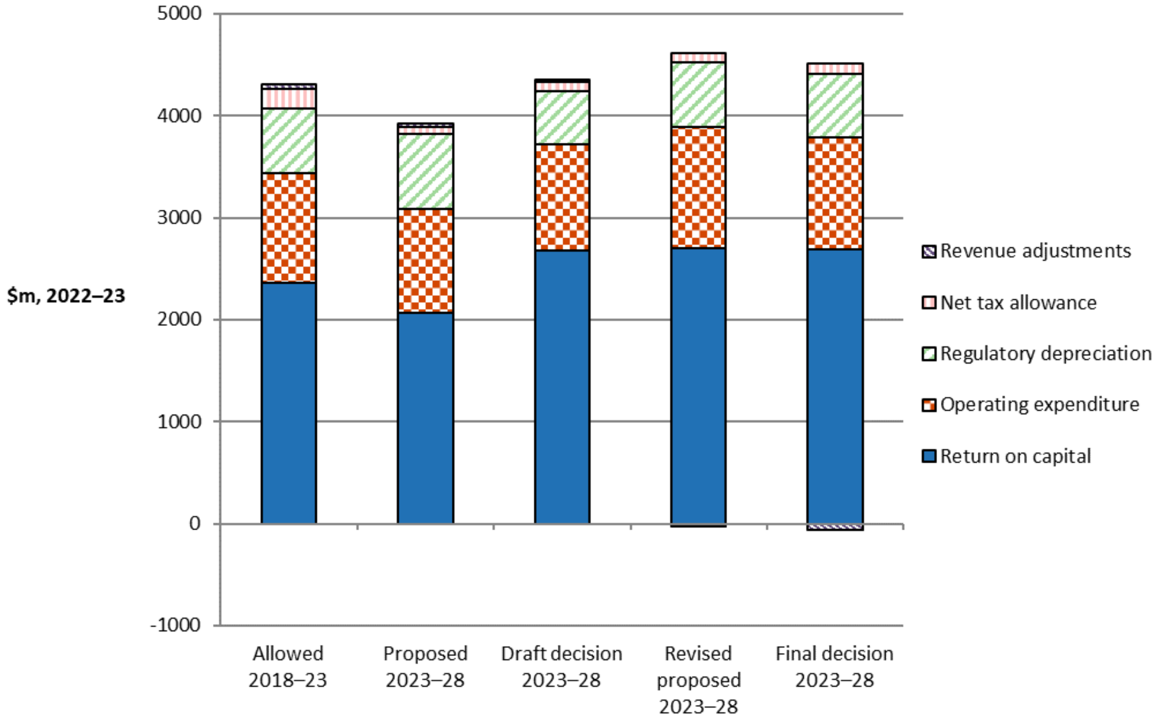
16 Transgrid, *2023–28 Revised Revenue Proposal, December 2022*, p. 169.

17 NER, cl. 6A.6.8(c)(2). We consider a divergence of up to 3% between the expected MAR 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. In the present circumstances, based on the X factors we have determined for Transgrid, this divergence is around –1.85%.

18 In real 2022–23 dollar terms, the average decrease in our approved expected MAR for Transgrid is 0.04% per annum over the 2023–28 period.

19 In real 2022–23 dollar terms, this consists of no change in revenue from 2022–23 to 2023–24, followed by a decrease of 2.2% in 2024–25 and an average annual increase of 0.68% during the remainder of the 2023–28 period.

Figure 0.3 Total revenue by building block components ($million, 2022–23)



Source: AER analysis.

1.4.2 Shared assets

Our final decision is to apply a shared assets revenue adjustment to Transgrid's total expected MAR for the 2023–28 period.

In our draft decision, we accepted Transgrid's proposal to apply a shared assets revenue adjustment to its revenues using the method from our shared asset guideline.[20] Our draft decision shared asset adjustment was consistent with the adjustment Transgrid calculated in its initial proposal.

Transgrid's revised proposal adopted our draft decision shared assets revenue adjustment.[21] Consistent with the draft decision, we confirm our assessment that Transgrid's forecast unregulated revenues from shared assets for the 2023–28 period are reasonable. Our final decision will see $10.6 million ($2022–23) shared with customers across the 2023–28 period.

Table 0.4 compares the shared asset revenue adjustments in Transgrid's revised proposal and our final decision.

Table 0.4 AER's final decision on Transgrid's shared asset revenue adjustment ($million, 2022–23)

	2023–24	2024–25	2025–26	2026–27	2027–28	Total
Transgrid's revised proposal	–1.8	–1.9	–2.0	–2.3	–2.6	–10.6

20 AER, *Draft decision, Transgrid Transmission Determination 2023 to 2028, Attachment 1 Maximum allowed revenue*, September 2022, pp. 13–14.

21 Transgrid, *2023–28 Revised revenue proposal*, December 2022, p. 166.

AER final decision	**–1.8**	**–1.9**	**–2.0**	**–2.3**	**–2.6**	**–10.6**

Source: AER analysis; Transgrid, *Revised Revenue Proposal 2023–28, Post Tax Revenue Model*, December 2022.

1.4.3 Indicative transmission charges

Transgrid is the main transmission network service provider for New South Wales (NSW) and the Australian Capital Territory (ACT). Therefore, our final decision on Transgrid's expected MAR will ultimately affect the annual electricity bills paid by customers in NSW and the ACT. There are several steps required to translate our revenue decision into indicative transmission charges, and then to estimate the bill impact.

Since we regulate Transgrid's prescribed transmission services under a revenue cap, changes in the consumption of electricity will affect the transmission charges ultimately paid by customers. Our approach to estimate the indicative effect of our final decision on forecast average transmission charges in NSW and the ACT is set out in our draft decision.[22] Based on our approach, we estimate that this final decision will result in an increase in annual average transmission charges from 2022–23 to 2027–28.[23]

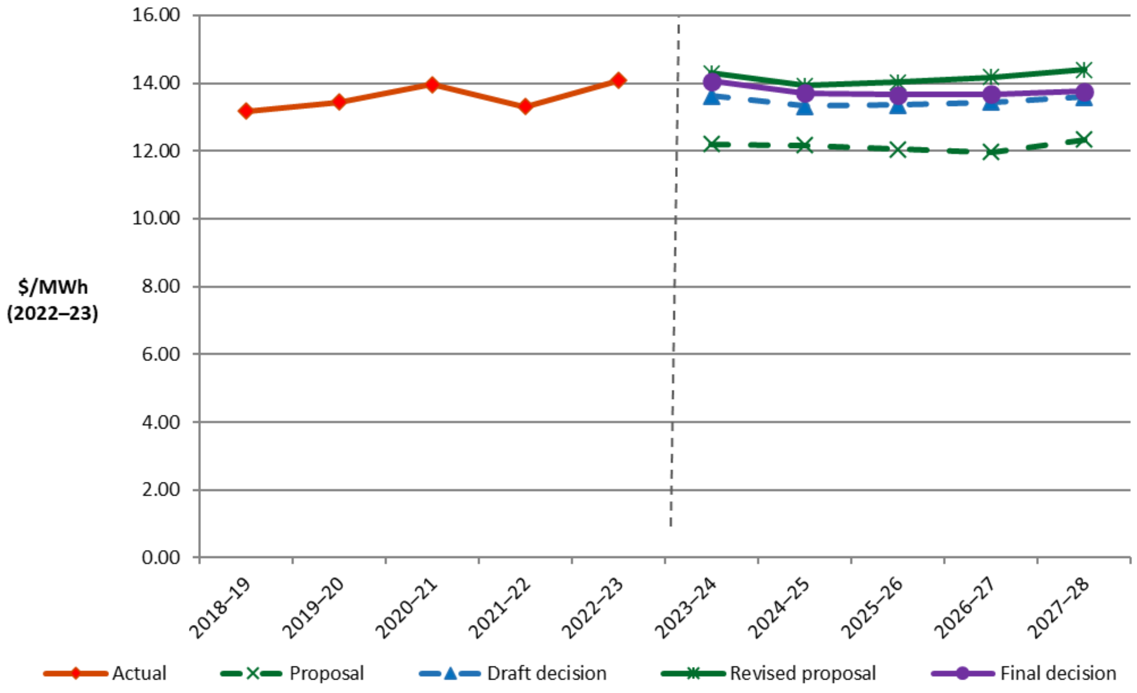
Figure 0.4 shows the indicative average transmission charges for the 2023–28 period compared to actual transmission charges over the current period in real terms ($2022–23). Based on the expected revenue determined in our final decision, the average transmission charges are expected to decrease from around $14.1 per MWh in 2022–23[24] to $13.8 per MWh in 2027–28.

[22] AER, *Draft decision, Transgrid Transmission Determination 2023 to 2028, Attachment 1 Maximum allowed revenue*, September 2022, pp. 14–15. Our final decision updated the forecast annual energy delivered in NSW using AEMO's 'central scenario' forecast in the NEM Electricity Statement of Opportunities (ESOO) 2022, version: 20/09/2022, Category: operational (sent out), available here.

[23] On average, the final decision transmission revenues will increase by 2.9% ($ nominal) per annum from 2022–23 to 2027–28. The forecast energy delivered in NSW and the ACT is expected to increase by an average of 0.4% per annum across that period. Overall, the indicative transmission charge is expected to increase by 2.4% ($ nominal) per annum from 2022–23 to 2027–28.

[24] Transmission charges for 2018–19 to 2021–22 are based on the actual revenue, whereas 2022–23 transmission charges are based on estimated revenue.

Figure 0.4 Indicative transmission price path for NSW and ACT ($/MWh, $2022–23)



Source: AER analysis.

Notes: The price path for the transmission network is based on actual and forecast energy throughput amounts for Transgrid's transmission network across NSW and the ACT.
Revenue used to calculate the 'Actual' indicative price path includes revenue from Inter- and Intra-Regional Settlements Residue collections and may not fully reflect the price path experienced by end-users.

1.4.4 Expected impact on electricity bills

The annual electricity bill for customers in NSW and the ACT reflects the combined cost of all the electricity supply chain components—wholesale energy generation, transmission, distribution, metering, and retail costs. This final decision primarily relates to the transmission charges for Transgrid's prescribed transmission services.[25]

We estimate the expected bill impact by varying Transgrid's transmission charges in accordance with our final decision, while holding all other components constant. This approach isolates the effect of our final decision on the core transmission charges for Transgrid only. However, this does not imply that other components will remain unchanged across the regulatory control period.[26] Our final decision determines lower revenues than proposed by Transgrid—largely due to our final decision approving a lower return on capital, opex and revenue adjustments building block. As a result, expected bill increases are lower than Transgrid's revised proposal, holding all else constant.

25 Transgrid, *Regulatory Proposal 2023–28, Reset RIN Workbook 7 indicative bill impacts,* 31 January 2022.

26 It also assumes that actual energy consumption will equal the forecast adopted in our final decision. Since Transgrid operates under a revenue cap, changes in energy consumption will also affect annual electricity bills across the 2023–28 period.

Transmission charges in NSW and the ACT represent approximately 9%[27] and 7%[28] of an average residential customer's typical annual electricity bill, respectively. We expect that our final decision will result in the transmission component of the average annual residential electricity bill for NSW and ACT customers to increase over the 2023–28 period:

- for NSW, the transmission component of a representative residential customer's[29] annual electricity bill will increase by about $19 (nominal) or 1.1% by 2027–28 from the 2022–23 total bill level
- for the ACT, the transmission component of a representative residential customer's[30] annual electricity bill will increase by about $16 (nominal) or 0.9% by 2027–28 from the 2022–23 total bill level.

Our estimated impact is based on the typical annual electricity usage of 4,353 kWh per annum for a residential customer in NSW.[31] For a residential customer in the ACT, our estimated potential impact is based on a typical annual electricity usage of 6,500 kWh per annum.[32] 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 0.5 shows our estimated impact of our final decision and Transgrid's revised proposal on the average annual electricity bills for residential customers in NSW and the ACT over the 2023–28 period.

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27 The transmission proportion of the bill in NSW is calculated based on the following sources of information:

AER, *Default market offer prices 2022–23 – Final determination – Cost assessment model,* 26 May 2022,

AER, *Final 2022-23 annual SCS pricing model,* April 2022, for Ausgrid, Endeavour Energy and Essential Energy,

AER, *2021-22 Economic Benchmarking RIN, worksheet "3.4 Operational data"*, October 2022, for Ausgrid, Endeavour Energy and Essential Energy.

The transmission proportion of the total residential customer's bill in NSW is calculated based on the following formula:

(Network use of system (NUOS) charges – the distribution proportion of the flat tariff) / AER's default market price for each of the distribution regions in NSW. It is then weighted against the number of customers in each distribution region serviced by Ausgrid, Endeavour Energy and Essential Energy.

28 AEMC, *2021 Residential Electricity Price Trends Report,* November 2021, pp. 10–12. The transmission proportion of the bill in the ACT is calculated by the transmission cost divided by the standing offer in the ACT.

29 AER, *Default market offer prices 2022–23 – Final determination – Cost assessment model*, May 2022. We have calculated the representative residential customer's bill in NSW as an average of the AER default market offer price for each of the distribution regions in NSW weighted against the number of customers in each distribution region serviced by Ausgrid, Endeavour Energy and Essential Energy.

30 ICRC, *Report 3 of 2022 – Retail electricity price recalibration 2022–23*, June 2022, p. 5. The representative residential customer's bill in the ACT is based on an 'average' consumption.

31 AER, *Default market offer prices 2022–23 – Final determination – Cost assessment model,* May 2022. This typical usage is a weighted average of the residential annual consumption amounts for each of the distribution regions in NSW.

32 ICRC, *Report 3 of 2022 – Retail electricity price recalibration 2022–23*, June 2022, p. 5. We have adopted an 'average' consumption for a residential customer in the ACT.

Table 0.5 Estimated impact of Transgrid's revised revenue proposal and the AER's final decision on average annual electricity bills for residential customers over the 2023–28 period ($ nominal)

	2022–23	2023–24	2024–25	2025–26	2026–27	2027–28
AER final decision						
NSW residential annual electricity bill	1,741[a]	1,745	1,746	1,750	1,754	1,760
Annual change[c]		4 (0.2%)	1 (0.0%)	4 (0.2%)	5 (0.3%)	6 (0.3%)
ACT residential annual electricity bill	1,807[b]	1,810	1,811	1,814	1,818	1,823
Annual change[c]		3 (0.2%)	1 (0.0%)	3 (0.2%)	4 (0.2%)	5 (0.3%)
Transgrid revised proposal						
NSW residential annual electricity bill	1,741[a]	1,748	1,749	1,754	1,761	1,769
Annual change[c]		7 (0.4%)	1 (0.0%)	6 (0.3%)	7 (0.4%)	8 (0.5%)
ACT residential annual electricity bill	1,807[b]	1,813	1,813	1,818	1,823	1,830
Annual change[c]		6 (0.3%)	0 (0.0%)	5 (0.3%)	5 (0.3%)	6 (0.4%)

Source: AER analysis;
Transgrid, *2023-28 Revised revenue proposal, Post-Tax Revenue Model – PEC Update*, March 2023;
Transgrid, *2023-28 Revenue proposal, 2023–28 RIN Workbook 7 Indicative bill impacts*, January 2022;
AEMC, *2021 Residential Electricity Price Trends Report*, November 2021, p. 12;
AER, *Default market offer prices 2022–23 – Final determination – Cost assessment model*, May 2022;
ICRC, *Report 3 of 2022 – Retail electricity price recalibration 2022–23*, June 2022, p. 5.

(a) AER analysis; *AER, Default market offer prices 2022–23 – Final determination – Cost assessment model*, May 2022.

(b) ICRC, *Report 3 of 2022 – Retail electricity price recalibration 2022–23*, June 2022, p. 5. Our representative residential customer's bill in the ACT is based on an 'average' consumption of 6500 kWh per annum.

(c) Annual change amounts and percentages are indicative. They are derived by varying the transmission component of 2022–23 bill amounts in proportion to yearly expected revenue divided by Transgrid's forecast energy. Actual bill impacts will vary depending on electricity consumption and tariff class.

Similarly, for average small business customers in NSW and the ACT that consume 10,000 kWh per annum,[33] transmission charges represent approximately 8%[34] and 7%[35] of a typical annual electricity bill, respectively. We expect that our final decision will result in the

33 AER, *Default market offer prices 2022–23 – Final determination – Cost assessment model*, May 2022; ICRC, Report 3 of 2022 – Retail electricity price recalibration 2022–23, June 2022, p. 5.

34 The approach to calculate the transmission proportion of the bill for small business customers in NSW is the same as the calculation approach for residential customers, see footnote 27.

35 AEMC, *2021 Residential Electricity Price Trends Report*, November 2021, p. 12.

transmission component of the average annual small business electricity bill for NSW and ACT customers to also increase over the 2023–28 period:

- for NSW, the transmission component of a representative small business customer's annual electricity bill[36] will increase by about $46 (nominal) or 1.1% by 2027–28 from the 2022–23 total bill level
- for the ACT, the transmission component of a representative small business customer's[37] annual electricity bill will increase by about $24 (nominal) or 0.9% by 2027–28 from the 2022–23 total bill level.

Table 0.6 shows the estimated impact from our final decision and Transgrid's revised proposal on the average annual electricity bills for small business customers in NSW and the ACT over the 2023–28 period.

Table 0.6 Estimated impact of Transgrid's revised proposal and the AER's final decision on average annual electricity bills for small business customers over the 2023–28 period (nominal)

	2022–23	2023–24	2024–25	2025–26	2026–27	2027–28
AER final decision						
NSW small business annual electricity bill	4,418[a]	4,428	4,430	4,440	4,451	4,465
Annual change[c]		10 (0.2%)	2 (0.0%)	10 (0.2%)	11 (0.3%)	14 (0.3%)
ACT small business annual electricity bill	2,780[b]	2,785	2,786	2,791	2,797	2,804
Annual change[c]		5 (0.2%)	1 (0.0%)	5 (0.2%)	6 (0.2%)	7 (0.3%)
Transgrid revised proposal						
NSW small business annual electricity bill	4,418[a]	4,435	4,437	4,451	4,467	4,486
Annual change[c]		17 (0.4%)	1 (0.0%)	14 (0.3%)	16 (0.4%)	19 (0.4%)
ACT small business annual electricity bill	2,780[b]	2,789	2,789	2,797	2,805	2,815
Annual change[c]		9 (0.3%)	1 (0.0%)	7 (0.3%)	8 (0.3%)	10 (0.4%)

Source: AER analysis;
Transgrid, *2023-28 Revised revenue proposal, Post-Tax Revenue Model – PEC Update*, March 2023
Transgrid, *2023–28 RIN Workbook 7 Indicative bill impacts*, January 2022;
AEMC, *2021 Residential Electricity Price Trends Report*, November 2021, p. 12;

36 AER, *Default market offer prices 2022–23 – Final determination – Cost assessment model*, May 2022.
We have calculated the representative small business customer's bill in NSW as an average of the AER default market offer price for each of the distribution regions in NSW weighted against the number of customers in each distribution region.

37 ICRC, *Report 3 of 2022 – Retail electricity price recalibration 2022–23*, June 2022, p. 5. The representative small business customer's bill in the ACT is based on a 'small' consumption.

AER, *Default market offer prices 2022–23 – Final determination – Cost assessment model*, May 2022; ICRC, *Report 3 of 2022 – Retail electricity price recalibration 2022–23*, June 2022, p. 5.

(a) AER analysis; AER, *Default market offer prices 2022–23 – Final determination – Cost assessment model*, May 2022.

(b) ICRC, *Report 3 of 2022 – Retail electricity price recalibration 2022–23*, June 2022, p. 5. Our representative small business customer's bill in the ACT is based on a 'small' consumption of 10,000 kWh per annum.

(c) Annual change amounts and percentages are indicative. They are derived by varying the transmission component of 2022–23 bill amounts in proportion to yearly expected revenue divided by Transgrid's forecast energy. Actual bill impacts will vary depending on electricity consumption and tariff class.

Glossary

Term	Definition
ABS	Australian Bureau of Statistics
AEMC	Australian Energy Market Commission
AEMO	Australian Energy Market Operator
AER	Australian Energy Regulator
AR	Allowed revenue
Capex	Capital expenditure
CESS	Capital expenditure sharing scheme
CPI	Consumer price index
DMIAM	Demand management innovation allowance mechanism
EBSS	Efficiency benefit sharing scheme
MAR	Maximum allowed revenue
NER	National Electricity Rules
NPV	Net present value
Opex	Operating expenditure
PTRM	Post-tax revenue model
RAB	Regulatory asset base
TNSP	Transmission network service provider