

Final decision

Transgrid transmission determination
1 July 2023 to 30 June 2028

Attachment 2 – Regulatory asset base

April 2023

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2 Regulatory asset base

Our revenue determination includes Transgrid's opening regulatory asset base (RAB) value as at 1 July 2023 and the projected RAB value for the 2023–28 regulatory control period (2023–28 period).¹ The value of the RAB substantially impacts Transgrid's revenue requirement, and the price consumers ultimately pay. Other things being equal, a higher RAB would increase both the return on capital and return of capital (depreciation) components of the revenue determination.² This final decision sets out:

- the opening RAB as at 1 July 2023
- the forecast closing RAB as at 30 June 2028
- that depreciation based on forecast capital expenditure (capex) is to be used for establishing the RAB as at the commencement of the 2028–33 regulatory control period.³

2.1 Final decision

2.1.1 Opening RAB as at 1 July 2023

Our final decision is to determine an opening RAB value of \$8,815.1 million (\$ nominal) as at 1 July 2023 for Transgrid. This amount is \$2.6 million (0.03%) higher than Transgrid's revised proposed opening RAB of \$8,812.6 million as at 1 July 2023.⁴ It reflects our update to the roll forward model (RFM) for actual consumer price index (CPI) for 2022–23. This final decision is \$413.5 million (4.5%) lower than our draft decision of \$9,228.7 million.⁵

To determine the opening RAB as at 1 July 2023, we have rolled forward the RAB over the 2018–23 period to arrive at a closing RAB value at 30 June 2023, in accordance with our RFM. This roll forward includes an adjustment at the end of the 2018–23 period to account for the difference between actual 2017–18 capex and the estimate approved in the 2018–23 determination.⁶ All other adjustments are applied as part of the final year adjustments at 30 June 2023 to establish the opening RAB value at 1 July 2023.⁷

Table 0.1 sets out our final decision on the roll forward of Transgrid's RAB for the 2018–23 period.

¹ NER, cl. 6A.14.1(5D).

² The size of the RAB also impacts the benchmark debt raising cost allowance. However, this amount is usually relatively small and therefore not a significant determinant of revenues overall.

³ NER, cl. 6A.14.1(5E).

⁴ Transgrid, *2023–28 Revised revenue proposal*, December 2022, p. 122.

⁵ This is mainly driven by the updates to the capex for 2021–22 (to reflect actual values) and the capex for 2022–23 (to reflect more up-to-date estimated values).

⁶ The end of period adjustment will be positive (negative) if actual capex is higher (lower) than the estimate approved at the 2018–23 determination. See NER, cl. S6A.2.1(f)(3).

⁷ Transgrid did not propose any final year asset adjustments in its initial proposal. However, we made an adjustment for capitalised leases to be rolled into the RAB at the end of the 2018–23 period in our draft decision. Transgrid adopted this adjustment in its revised proposal. Transgrid, *2023–28 Revised revenue proposal*, December 2022, p. 122.

Table 0.1 AER's final decision on Transgrid's RAB for the 2018–23 period (\$million, nominal)

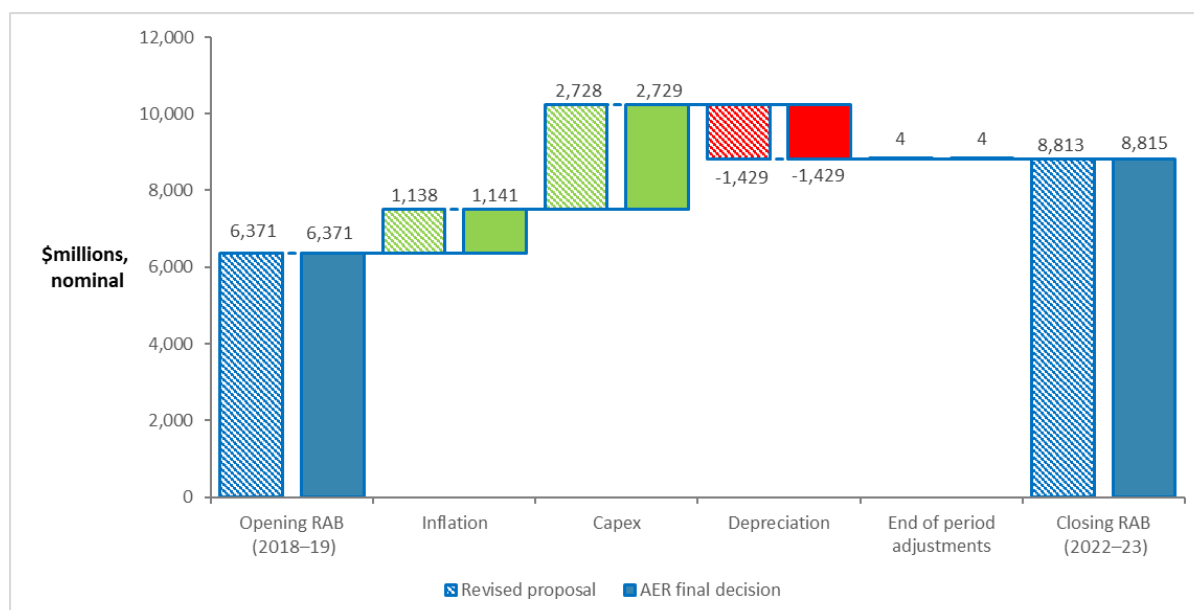
	2018–19	2019–20	2020–21	2021–22	2022–23 ^a
Opening RAB	6,371.2	6,463.9	6,638.7	7,201.1	7,646.3
Net capex ^b	235.0	330.9	795.2	484.7	882.7
Indexation of opening RAB	113.7	119.0	57.1	251.9	598.8
Less: straight-line depreciation ^c	256.0	275.1	290.0	291.5	316.7
Interim closing RAB	6,463.9	6,638.7	7,201.1	7,646.3	8,811.2
Difference between estimated and actual capex in 2017–18					–0.1
Return on difference for 2017–18 capex					–0.1
Final year asset adjustment ^d					4.2
Closing RAB as at 30 June 2023					8,815.1

Source: AER analysis.

- (a) Based on estimated capex provided by Transgrid. We will true-up the RAB for actual capex at the next reset.
- (b) As-incurred, net of disposals, and adjusted for actual CPI and half-year WACC. Excluding capex incurred on Humelink Stage 1.
- (c) Adjusted for actual CPI. Based on forecast as-commissioned capex.
- (d) Includes the addition of capitalised leases as at 30 June 2023.

Figure 2.1 shows the key drivers of the change in the value of Transgrid's RAB over the 2018–23 period for this final decision. Overall, the closing RAB at the end of the 2018–23 period is 38.4% higher than the opening RAB at the start of that period, in nominal terms. The new capex increases the RAB by 42.8%, while inflation indexation increases it by 17.9%. Depreciation, on the other hand, reduces the RAB by 22.4%.

Figure 2.1 Key drivers of changes in the RAB over the 2018–23 period—Transgrid’s revised proposal compared with the AER’s final decision (\$million, nominal)



Source: AER analysis

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

In the draft decision, we largely accepted Transgrid's proposal to calculate the opening RAB as at 1 July 2023, with the following amendments:⁸

- removed capex in 2021–22 and 2022–23 relating to capitalised leases and instead included a lower amount representing the present value of the leases as at 1 July 2023 as a final year asset adjustment
- included Software as a Service (SaaS) related expenditure as capex in 2021–22 and 2022–23, and added it to the RAB for the 2018–23 period
- corrected an error in the capex and forecast depreciation inputs related to equity raising costs to reflect the 2022–23 return on debt updated post-tax revenue model (PTRM) for Transgrid's 2018–23 determination.

We also updated the following inputs for the RFM, resulting in an overall increase to Transgrid's proposed opening RAB as at 1 July 2023:⁹

- the nominal weighted average cost of capital (WACC) for 2022–23 and the forecast straight-line depreciation inputs for 2018–23, consistent with the values calculated in our 2022–23 return on debt update in the 2018–23 PTRM

⁸ AER, *Draft decision: Transgrid transmission determination 2023 to 2028, attachment 2 – Regulatory asset base*, September 2022, p. 1.

⁹ AER, *Draft decision: Transgrid transmission determination 2023 to 2028, attachment 2 – Regulatory asset base*, September 2022, pp. 1–2.

- the actual inflation input for 2021–22 of 3.5% using the December 2021 CPI published by the Australia Bureau of Statistics (ABS)
- the estimated inflation input for 2022–23 of 7.8% based on the Reserve Bank of Australia's (RBA) forecast published in its August 2022 *Statement on Monetary Policy*.

We noted the roll forward of Transgrid's RAB included estimated capex for 2021–22 and 2022–23, and estimated inflation for 2022–23, because these actual values were not yet available at the time of the draft decision.¹⁰

In its revised proposal, Transgrid adopted all of our draft decision changes.¹¹ In addition, Transgrid updated 2021–22 estimated capex with actuals and revised the 2022–23 capex estimate with latest figures.¹²

We have checked the 2021–22 actual capex in the revised proposal and are satisfied it reconciles with the values presented in Transgrid's annual regulatory accounts for that year.¹³ We accept Transgrid's revision to the 2022–23 net capex estimate of \$882.7 million (\$ nominal) for this final decision.¹⁴ This amount is \$109.6 million lower than what we approved in our draft decision, reflecting more recent data. We note that the financial impact of any difference between actual and estimated capex for 2022–23 will be accounted for at the next reset.

Our final decision also updates the estimated inflation input for 2022–23 in the RFM with actual CPI of 7.83%. This value is based on the December 2022 CPI published by the ABS, which became available after Transgrid submitted its revised proposal.

We also consider the extent to which our roll forward of the RAB to 1 July 2023 contributes to the achievement of the capex incentive objective.¹⁵ The review period of past capex for this transmission determination is over 2016–17 to 2020–21. As discussed in the draft decision, we consider that the capex incurred in those years are consistent with the capex criteria and can therefore be included in the RAB.¹⁶

For this final decision, we have included Transgrid's actual capex for 2021–22 and estimated capex for 2022–23 in the RAB roll forward to 1 July 2023. At the next reset, the actual capex for 2021–22 and 2022–23 will form part of the review period for whether past capex should

¹⁰ AER, *Draft decision: Transgrid transmission determination 2023 to 2028, attachment 2 – Regulatory asset base*, September 2022, p 11.

¹¹ Transgrid, *2023–28 Revised revenue proposal*, December 2022, p. 121; Transgrid, *2023–28 Revised revenue proposal, Roll forward model*, December 2022.

¹² Transgrid, *2023–28 Revised revenue proposal*, December 2022, p. 122; Transgrid, *2023–28 Revised revenue proposal, Roll forward model*, December 2022.

¹³ Excluding capex incurred on Humelink Stage 1.

¹⁴ This amount is on an as-incurred basis and includes a half-year WACC allowance to compensate for the six-month period before capex is added to the RAB.

¹⁵ NER, cll. 6A.14.2(b) and 6A.5A(a).

¹⁶ NER, cl. S6A.2.2A(c); AER, *Draft decision: Transgrid transmission determination 2023 to 2028, attachment 2 – Regulatory asset base*, September 2022, pp. 13–14.

be excluded for inefficiency reasons.¹⁷ Our RAB roll forward applies the incentive framework approved in the previous transmission determination, which included the use of a forecast depreciation approach in combination with the application of the capital expenditure sharing scheme (CESS).¹⁸ As such, we consider that the 2018–23 RAB roll forward contributes to an opening RAB (as at 1 July 2023) that includes capex that reflects prudent and efficient costs, in accordance with the capex criteria.¹⁹

2.1.2 Forecast closing RAB as at 30 June 2028

Once we have determined the opening RAB as at 1 July 2023, we roll forward that RAB by adding forecast capex and inflation, and reducing the RAB by depreciation to arrive at a forecast closing value for the RAB as at the end of the 2023–28 period.²⁰

For this final decision, we determine a forecast closing RAB value at 30 June 2028 of \$10,756.4 million (\$ nominal) for Transgrid. This is \$184.5 million (1.7%) lower than Transgrid's revised proposal of \$10,940.9 million. Our final decision on the forecast closing RAB reflects the amended opening RAB as at 1 July 2023, and our final decisions on the expected inflation rate (Attachment 3), forecast depreciation (Attachment 4) and forecast capex (Attachment 5).²¹

Table 0.2 sets out our final decision on the forecast RAB for Transgrid over the 2023–28 period.

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

	2023–24	2024–25	2025–26	2026–27	2027–28
Opening RAB	8,815.1	9,920.8	10,368.4	10,494.7	10,599.3
Capital expenditure ^a	1,204.0	559.3	270.4	277.2	319.9
Inflation indexation on opening RAB	257.3	289.6	302.7	306.4	309.4
Less: straight-line depreciation ^b	355.7	401.4	446.7	479.0	472.3
Closing RAB	9,920.8	10,368.4	10,494.7	10,599.3	10,756.4

Source: AER analysis.

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

¹⁷ Here, 'inefficiency' of past capex refers to three specific assessments (labelled the overspending, margin and capitalisation requirements) detailed in NER, cl. S6A.2.2A. The details of our ex-post assessment approach for capex are set out in AER, Capital expenditure incentive guideline, November 2013, pp. 12–20.

¹⁸ AER, *Final decision: Transgrid transmission determination 2018–23*, attachment 2, May 2018, p. 10.

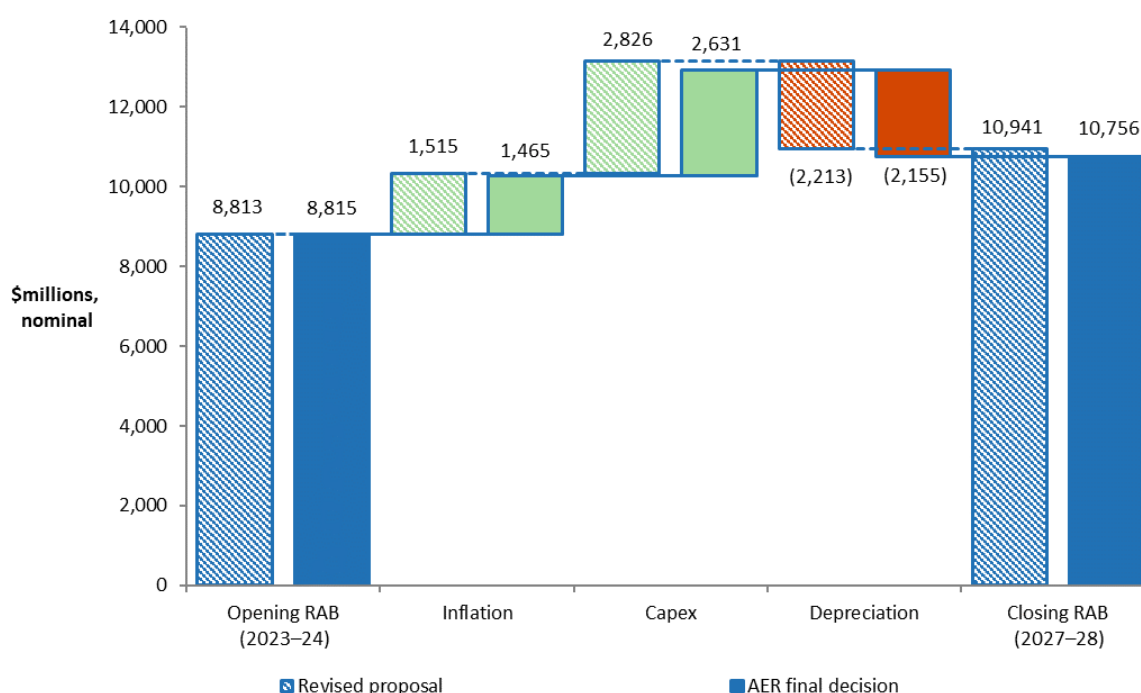
¹⁹ NER, cll. 6A.5A(a), 6A.6.7(c) and 6A.14.2(b).

²⁰ NER, cl. S6A.2.4.

²¹ Capex enters the RAB net of forecast disposals. It includes equity raising costs (where relevant) and the half-year WACC to account for the timing assumptions in the PTRM. Therefore, our final decision on the forecast RAB also reflects our amendments to the rate of return for the 2023–28 period (Attachment 3).

Figure 0.1 shows the key drivers of the change in Transgrid's RAB over the 2023–28 period for this final decision. Overall, the closing RAB at the end of the 2023–28 period is forecast to be 22.0% higher than the opening RAB at the start of that period, in nominal terms. The approved forecast net capex increases the RAB by 29.8%, while expected inflation increases it by 16.6%. Forecast depreciation, on the other hand, reduces the RAB by 24.4%.

Figure 0.1 Key drivers of changes in the RAB over the 2023–28 period — Transgrid's revised proposal compared with the AER's final decision (\$million, nominal)



Source: AER analysis.

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

Forecast net capex is a significant driver of the increase in the RAB. In our final decision, we approve \$2,436.2 (\$2022–23) of Transgrid's revised proposed forecast net capex of \$2,606.6 million (\$2022–23)²² for the 2023–28 period as we are satisfied that the reduced amount reasonably reflects the capex criteria.²³ This is 6.5% lower than Transgrid's revised proposal. Refer to Attachment 5 to this final decision for the discussion on forecast capex.

2.1.3 Application of depreciation approach in RAB roll forward for next reset

When we roll forward Transgrid's RAB for the 2023–28 period at the next reset, we must adjust for depreciation. For this final decision, we determine that the depreciation approach to be applied to establish Transgrid's opening RAB at the commencement of the 2028–33 period will be based on the depreciation schedules (straight-line) using forecast capex at the

²² This amount is the as incurred capex, net of disposals and excludes the half-year WACC adjustment.

²³ Please see Attachment 5 to this final decision for the discussion on forecast capex.

asset class level approved for the 2023–28 period.²⁴ This approach is consistent with our draft decision. Further, this approach is consistent with our *Framework and Approach*.²⁵ Transgrid's revised proposal adopted our draft decision approach.²⁶

As discussed in Attachment 9, we will also apply the CESS to Transgrid for the 2023–28 period. We consider that the CESS will provide sufficient incentives for Transgrid to achieve capex efficiency gains over that period. We are satisfied that the use of a forecast depreciation approach in combination with the application of the CESS and our other ex post capex measures are sufficient to achieve the capex incentive objective.²⁷

2.2 Assessment approach

We did not change our assessment approach for the RAB from our draft decision. Attachment 2 (section 2.3) of our draft decision details that approach.²⁸

²⁴ NER, cl. 6A.14.1(5E).

²⁵ AER, *Framework and Approach Transgrid – regulatory control period commencing 1 July 2023*, July 2021, pp. 27-28.

²⁶ Transgrid, *2023-28 Revised revenue proposal*, December 2022, p. 123.

²⁷ Our ex-post capex measures are set out in the capex incentives guideline, AER, *Capital expenditure incentive guideline for electricity network service providers*, November 2013, pp. 13–21. The guideline also sets out how all our capex incentive measures are consistent with the capex incentive objective.

²⁸ AER, *Draft decision: Transgrid transmission determination 2023 to 2028, attachment 2 – Regulatory asset base*, September 2022, pp. 5–11.

Glossary

Shortened form	Extended form
ABS	Australian Bureau of Statistics
AER	Australian Energy Regulator
Capex	Capital expenditure
CESS	Capital expenditure sharing scheme
CPI	Consumer price index
NER	National Electricity Rules
PTRM	Post-tax revenue model
RAB	Regulatory asset base
RBA	Reserve Bank of Australia
RFM	Roll forward model
SaaS	Software as a Service
WACC	Weighted average cost of capital