Final Decision

Transgrid Waratah Super Battery (non-contestable)

(1 July 2024 to 30 June 2029)

Made under the *Electricity Infrastructure Investment Act 2020 (NSW)*

December 2023

AUSTRALIAN ENERGY REGULATOR

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Note

This document forms the AER's final decision on Transgrid's 2024-29 revenue determination for the non-contestable components of the Waratah Super Battery (WSB) project.

As a number of issues were settled at the draft decision stage or required only minor updates, we have not repeated all relevant attachments from our draft decision. The draft decision attachments that haven't changed and may be referenced as part of this decision are:

- Appendix A – Assessment approaches
- Appendix C – Adjustment Mechanisms
- Confidential Appendix D – Rate of return averaging periods

For a complete picture of the WSB project, this document should be read alongside the following determinations:

- AER – Transgrid 2024-29 – Draft Decision – Non-contestable components of the Waratah Super Battery project – September 2023
- AER – Final Determination – Waratah Super Battery – SIPS Service component 14 December 2022
- AER – Final Determination – Waratah Super Battery – Paired Generation Services component 15 December 2023

1 Summary

Transgrid was directed to undertake the Waratah Super Battery (WSB) project by the NSW Minister for Energy on 14 October 2022. The WSB project addresses the anticipated shortfall in electricity supply caused by the potential early closure of the Origin Energy Eraring power station, by increasing the transfer capacity of the existing transmission network and allowing existing generators in NSW to increase output.

This is the first non-contestable project to be delivered and the first determination for a non-contestable project under the *Electricity Infrastructure Investment Act 2020 (NSW)* (EII Act). We have assessed Transgrid's proposals in line with the requirements set out in the EII Act, the *Electricity Infrastructure Investment Regulation 2021 (NSW)* (EII Regulation) and the process set out in our Revenue Determination guideline for non-contestable projects.[1]

We received a proposal from Transgrid on 30 June 2023 for the non-contestable elements of the project—the network augmentations and the implementation of the System Integrity Protection Scheme (SIPS). We published our draft decision on 29 September 2023, and Transgrid submitted a revised proposal on 2 November 2023, which accepted or adopted all elements of the draft decision.

Our final decision is consistent with our draft decision, with updates for actual (rather than estimated) expenditure and inflation where relevant, as well as for the latest available rate of return data.

Our final decision is to approve $145.2 million ($ 2023–24) in capital expenditure (capex) (as incurred) and $21.6 million ($ 2023–24) in operating expenditure (opex). This leads to $106.8 million ($ nominal) in revenue to be recovered over the 2024–29 regulatory period. This represents what we consider to be the prudent, efficient, and reasonable costs of delivering the WSB project, ensuring consumers pay no more than necessary for safe and reliable electricity.

Our final decision has been delivered within the timeframe set out in the EII Regulation of 126 business days.

[1] Transmission Efficiency Test and revenue determination guideline: non-contestable network infrastructure projects – April 2023.

2 Background

2.1 The Project

On 17 February 2022, the Origin Energy Eraring Power station announced it proposed to shut down by August 2025, seven years earlier than planned. Australian Energy Market Operator (AEMO) identified a shortfall in electricity supply to the demand centres of Sydney, Newcastle, and Wollongong between 2025–2031 because of the proposed early closure.

To address this, on 14 October 2022, the NSW Minister for Energy declared the Waratah Super Battery (WSB) a Priority Transmission Infrastructure Project under the EII Act and directed Transgrid to undertake it as the Network Operator.[2]

The WSB project addresses the shortfall caused by the Eraring power station closure by increasing the transfer capacity of the transmission network, allowing existing generators in NSW to increase power supply. The project consists of four components.

1. The Network Augmentations to increase the transfer capacity of the network by increasing the thermal capacity of the lines (raising and tightening them) and upgrading a series of substations.
2. The SIPS control system is a communication system that monitors the activity of the transmission network and initiates network protection measures in the event of a contingency.
3. The Paired Generation services are a portfolio of generators that will rapidly reduce output when signaled by the SIPS control system, reducing the load on the transmission network in the event of a contingency.
4. The Battery Service is a temporary power supply located at the end of the transmission network, next to the demand centres of Sydney, Newcastle, and Wollongong. It discharges power for up to two hours when signaled by the SIPS control system, ensuring power supply is uninterrupted during a contingency event.

The Ministerial Order that directed Transgrid to undertake the project as the Network Operator specifies the project and the timeframe for delivery. Transgrid must comply with the Order and has little discretion to vary any element.

2.2 Regulatory Framework

The WSB project is being delivered under the NSW Electricity Infrastructure Roadmap (the Roadmap), which is the NSW Government's plan to transition NSW away from a reliance on coal-based generation to renewal energy generation. The Roadmap is enabled by the EII Act and the EII Regulation.

[2] NSW Gazette, Number 473 – Electricity and Water, 14 October 2022, https://gazette.legislation.nsw.gov.au/so/download.w3p?id=Gazette_2022_2022-473.pdf.

The AER is a regulator under the EII Act.[3] One of our functions is to determine the revenue a Network Operator may collect for undertaking a network infrastructure project.[4] There are two ways a Network Operator may be selected to undertake a network infrastructure project.

1. Under a contestable process, a Network Operator is selected following a competitive assessment procurement process conducted by the Infrastructure Planner.
2. Under a non-contestable process, a Network Operator may be selected directly by the Infrastructure Planner.

Under either process, the revenue an entity may collect from undertaking the network infrastructure project is regulated by the AER and specified in a revenue determination. A revenue determination made for a contestable process is largely based on the contractual arrangements identified from the competitive assessment process (provided the process was genuine and appropriate).

A revenue determination made for a non-contestable process involves an assessment of the Network Operators' forecast costs and revenue to ensure only the prudent, efficient, and reasonable costs of delivering the project are recovered.

The entities to deliver the Battery Service and Paired Generation services are selected via a contestable process (competitive assessment process), for which our first determination, the Battery Service, was completed in 2022.[5]

Transgrid was selected to deliver the Network Augmentations and the SIPS control system via a non-contestable process which is the subject of this final determination.

We are required to publish this determination and our reasons for it in accordance with clause 53(1) of the EII Regulation and the Guideline.[6]

2.3 Process Undertaken

Under the NSW Roadmap, the Scheme Financial Vehicle (SFV) pays the Network Operator the amounts set out in our revenue determinations. The SFV recovers the costs of the NSW Roadmap from Distribution Network Service Providers, who recover it from consumers.

The matters a revenue determination must cover are set out in the EII Act, EII Regulation and our Guideline. Our Guideline also sets out our process for making a revenue determination.

On 30 June 2023, Transgrid submitted its initial revenue proposal to the AER for the non-contestable elements of the WSB project. We received two stakeholder submissions in response to the initial proposal for consideration in developing our draft decision.

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3 EII Act, s. 64.

4 EII Act, s. 38.

5 AER, *Final determination – Waratah Super Battery – SIPS Service Component*, December 2022. The AER's *Final determination – Waratah Super Battery – Paired Generation Services component* is to be released on the same day as this decision.

6 We have decided not to publish Confidential Appendix D as we are satisfied that it is not appropriate to do so, as the information contained in this appendix is confidential and commercially sensitive – see EII Regulation cl. 53(4).

On 29 September 2023, we made our draft decision. On 2 November 2023, Transgrid submitted its revised proposal to the AER. By 24 November 2023 (the closing date for public submissions), the AER had received four stakeholder submissions on the AER's draft decision and Transgrid's revised proposal. No late submissions were received.

This final decision is made in response to Transgrid's revised proposal and takes into consideration the submissions received from our stakeholders.

3 Revised Proposal

Transgrid submitted its revised revenue proposal to the AER on Thursday 2 November 2023. Most elements of the proposal were settled at the draft decision stage, with Transgrid including all elements of the draft decision in its revised proposal.

Transgrid *accepted* the major elements of the draft decision and included these in its revised proposal, specifically:

- the forecast capex, including pre-period capex,
- the forecast opex, including pre-period opex,
- the opening Regulatory Asset Base (RAB),
- the forecast depreciation using the straight-line approach,
- the principle of applying the same rate of return to pre-period costs as approved in the 2018–23 and 2023–28 revenue determinations for Transgrid's prescribed transmission services under the National Electricity Rules (NER),
- using the 2022 Rate of Return Instrument (2022 Instrument) to set the rate of return during the WSB regulatory control period; this included:
  - commencing the transition to the 10-year trailing average return on debt portfolio in year 1 (2024–25), followed by annual debt updates,
  - agreeing to apply the risk-free rate and debt averaging periods which were nominated in Transgrid's initial proposal and accepted in our draft decision,
- the method for estimating forecast inflation,
- the proposed approach to the application of the Efficiency Benefit Sharing Scheme (EBSS) and the Service Target Performance Incentive Scheme (STPIS),
- the 16 adjustment mechanisms, and
- the forecast Maximum Allowed Revenue (MAR) as calculated using the building block approach per the AER's post-tax revenue model (PTRM).

Transgrid's revised proposal differed from the AER's draft decision on three elements:

1. The application of the Capital Expenditure Sharing Scheme (CESS),
2. Transgrid's proposed adjustment to accelerate depreciation, and
3. Updating the rate of return applied to the pre-period costs for actual inflation.

For the first two of these elements, Transgrid has *adopted* the AER's decisions in its revised proposal but maintains the policy positions expressed in its initial proposal. Namely:

- applying the CESS introduces an asymmetric risk for Network Operators, that will increase the cost of investment, and
- the proposed adjustment to accelerate depreciation is necessary to ensure Transgrid has sufficient cashflows to maintain its credit rating, ensuring the cost of financing doesn't increase.

The third of these elements had a small flow-through effect on all building block calculations, such that the figures in Transgrid's revised proposal were slightly different to those in the AER's draft decision, notwithstanding Transgrid's acceptance (or adoption) of all the major aspects of the draft decision.

Transgrid's revised proposal noted that several elements relying on market data – forecast inflation and the rate of return – would be updated by the AER for the final decision.

4 Our Final Decision

Our final decision is broadly consistent with our draft decision; however, we have:

- updated estimated pre-period expenditure to account for actual audited figures and more up to date estimates.
- updated our estimates of forecast inflation and the rate of return to reflect more recent market data that has become available after our draft decision.
- adjusted the rate of return applied to pre-period costs to reflect actual inflation for the relevant year (2022–23), rather than forecast inflation.

Transgrid accepted or adopted all aspects of our draft decision in its revised proposal, which the stakeholder submissions also supported. Consequently, the differences between our final decision and Transgrid's revised proposal are due to mechanical updates for the latest available data at the time of making our final decision.

4.1 Key components of our final decision

Our final decision for the 2022–24 pre-period expenditure determines:

- $105.5 million ($ 2023–24) in capex (as incurred)
- $3.3 million ($ 2023–24) in opex
- a nominal rate of return of 11.31% (actual inflation) and 5.77% (estimated inflation) for 2022–23 and 2023–24 respectively.

Key components of our final decision for the 2024–29 regulatory period are:

- $145.2 million ($ 2023–24) in capex (as incurred)
- $21.6 million ($ 2023–24) in opex
- an opening RAB of $105.5 million ($ nominal) as at 1 July 2024
- a nominal rate of return of 7.01% resulting in a return on capital of $79.9 million ($ nominal)
- regulatory depreciation of –$0.4 million ($ nominal)
- corporate income tax of $0.05 million ($ nominal)
- a total revenue cap of $106.8 million ($ nominal)
- the application of the CESS
- the deferral of the decision to apply the EBSS and consideration of the STPIS
- the application of 16 adjustment mechanisms.

5 Total Revenue and Schedule of Payments

We determine Transgrid's annual building block revenue requirement using a building block approach.[7] The schedule of payments[8] is derived from the annual building block revenue requirement, on a quarterly basis, in accordance with our non-contestable Guideline.[9]

This section sets out our final decision on the total revenue to be recovered by Transgrid for the WSB project over the 2024–29 regulatory control period. Our assessment approach for making this final decision is consistent with our draft decision and is set out in in section 1 of Appendix A to our draft decision. [10]

5.1 AER final decision

5.1.1 Total amount and components

We approve a total revenue cap of $106.8 million ($ nominal) for Transgrid for the 2024–29 period (see Table 5.1). This is an increase of $2.5 million (2.4%) to Transgrid's revised proposal total revenue cap of $104.3 million for this period. This increase reflects the net impact of our final decision in updating components of the rate of return for the latest available information.

Table 5.1 AER's final decision on Transgrid's annual building block revenue requirement and estimated total revenue cap ($million, nominal)

	2024–25	2025–26	2026–27	2027–28	2028–29	Total
Return on capital	7.4	17.3	18.5	18.4	18.3	79.9
Regulatory depreciation[a]	–3.1[b]	–2.3[b]	1.3	1.6	2.0	–0.4[b]
Operating expenditure[c]	2.6	4.8	5.4	5.6	5.3	23.7
Revenue adjustments[d]	3.6	0.0	0.0	0.0	0.0	3.6
Net tax allowance	0.05	0.0	0.0	0.0	0.0	0.05
Annual building block revenue requirement	**10.6**	**19.8**	**25.2**	**25.7**	**25.5**	**106.8[e]**

Source: AER analysis.

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

(b) Regulatory depreciation for 2024–25 and 2025–26 is negative due to there being no straight-line depreciation, as capex is not commissioned until the end of year 2 (2025–26). As a result, the total regulatory depreciation building block is also negative. For more information, see section 7 of our draft decision.

(c) Includes debt raising costs.

(d) Includes revenue adjustments relating to opex incurred prior to the start of the first regulatory control period

(e) The estimated total revenue cap is equal to the total annual building block revenue requirement.

Transgrid's revised proposal adopted almost all aspects of our draft decision, except for the pre-period weighted average cost of capital (WACC).[11] Our final decision is to accept Transgrid's revised proposal, while updating the pre-period capex and rate of return to reflect

7 EII Chapter 6A, cll.6A.4.2(a)(1)–(2) and 6A.14.1(1)(i)–(ii).

8 EII Regulations, cl. 52(1)–(2).

9 EII Regulations, cll. 47A(2) and 52(3).

10 AER, *Draft decision: Transgrid 2024-29 - WSB project (Non-contestable) - Appendix A - Assessment approaches,* September 2023, pp. 1–4.

11 Transgrid, *Waratah Super Battery revised proposal PTRM*, November 2023.

the latest available data. Further discussion on this can be found in sections 6 and 7 of this final decision.

5.1.2 Schedule of payments and payment dates

Our final decision is to approve a quarterly schedule of payments totalling $104.2 million ($ nominal) over the 5 years of the 2024–29 period.[12] This amount is equivalent to the total revenue cap we have approved of $106.8 million ($ nominal) for Transgrid in net present value terms.[13] This is $2.4 million (2.3%) higher than Transgrid's revised proposal of $101.8 million. The difference reflects the updates we have made to the rate of return in this final decision which are used to calculate the schedule of payments in nominal dollar terms.

Transgrid's revised proposal accepted all aspects of our draft decision on the schedule of payments. Our final decision subsequently applies the same methodology and reasoning for calculating the schedule of payments and the timing for when these payments are to be made.[14]

Table 5.2 sets out our final decision schedule of payments for the WSB project.

Table 5.2 AER's final decision schedule of payments and timing ($ nominal)

	Quarter 1 (30 September)	Quarter 2 (31 December)	Quarter 3 (31 March)	Quarter 4 (30 June)	Total
2024–25	2,522,525	2,565,639	2,609,489	2,654,089	**10,351,742**
2025–26	4,710,580	4,791,091	4,872,977	4,956,264	**19,330,912**
2026–27	5,992,881	6,095,308	6,199,486	6,305,444	**24,593,118**
2027–28	6,096,890	6,201,095	6,307,080	6,414,878	**25,019,943**
2028–29	6,062,586	6,166,205	6,271,594	6,378,785	**24,879,170**

Source: AER analysis.

5.1.3 Mechanism to amend the schedule of payments

Transgrid's revenue proposal includes an adjustment mechanism to amend the quarterly schedule of payments for, among other factors, cost pass-throughs and an updated rate of return. Our draft decision identified an inability for the PTRM, as initially proposed by Transgrid, to give effect to these mid-period adjustments and consequently made

[12] This is set out in table 5.2 and Appendix B of this final decision.

[13] The sum of the quarterly revenue payments is equal to the total revenue cap in net present value terms. However, in nominal terms the $104.2 million total for quarterly revenue payments does not align with the $106.8 million total revenue cap due to adjusting for the time value of money. In simple terms, the total revenue cap assumes one payment at the end of each year; but instead Transgrid will receive a slightly lower amount in quarterly payments spread across each year.

[14] AER, *Draft decision, Transgrid Waratah Super Battery (non-contestable), 1 July 2024 to 30 June 2029,* 29 September 2023, available at https://www.aer.gov.au/industry/registers/determinations/waratah-super-battery-project-network-augmentation-and-sips-control-system-non-contestable

amendments to the PTRM to implement this functionality.[15] Transgrid's revised proposal PTRM accepts all the amendments made in our draft decision.

After this, we have included further amendments in our final decision PTRM. These are to address shortcomings in the draft decision amended PTRM, where some fringe cases for mid-period adjustments were not accommodated. The calculation methodology for reallocating the incremental revenue difference that Transgrid had under- or over-recovered in past years is consistent with that set out in our draft decision.[16]

[15] To accommodate the EII framework, Transgrid's proposal PTRM already contained a number of amendments to the standard NER-issued transmission PTRM (version 5.1 issued May 2022) in accordance with our *Guidance note – Amendments to the NER PTRM for EII revenue determinations*, published June 2023 (PTRM guidance note).

[16] AER, *Draft decision, Transgrid Waratah Super Battery (non-contestable), 1 July 2024 to 30 June 2029,* 29 September 2023, section 4.2.3.

6 Regulated Asset Base

This section sets out our final decision on Transgrid's opening WSB RAB value as at 1 July 2024 and the projected RAB value for the 2024–29 regulatory control period. It also presents our final decision that the depreciation for establishing the RAB as at the commencement of the 2029–34 period is to be based on forecast capex.[17] 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.

Our assessment approach for making this final decision is consistent with our draft decision and is set out in in section 2 of Appendix A to our draft decision.[18]

6.1 AER final decision

6.1.1 Opening RAB as at 1 July 2024

Our final decision is to approve an opening RAB value for Transgrid of $105.5 million ($ nominal) as at 1 July 2024, which is the same as Transgrid's revised proposal.[19] We forecast a closing RAB value of $258.7 million by 30 June 2029. This represents an increase of $0.3 million (0.1%) compared with Transgrid's revised proposal. The reasons for our final decision are discussed below.

This final decision includes a determination on an opening RAB for Transgrid's WSB project despite being a new non-contestable project under the EII framework, due to Transgrid being required to incur capex prior to the first regulatory period. To establish this opening RAB, we have rolled forward the pre-period capex incurred by a nominal WACC to the beginning of the period as at 1 July 2024.

Transgrid's revised proposal accepted our draft decision on calculating the opening RAB but submitted that the nominal WACC applied in the pre-period years should be updated for actual inflation. Transgrid's revised proposal therefore applied a pre-period WACC of 11.31% for 2022–23, instead of the 5.75% applied for this year in our draft decision.[20] As discussed in section 6.1.1 below, we are satisfied with Transgrid's justification and have accepted the pre-period WACC of 11.31% for 2022–23 in our final decision.

Transgrid's revised proposal PTRM did not update the 2022–23 estimated capex for actual capex. In response to our information request, Transgrid submitted audited data which reported its actual capex for 2022–23 and updated capex estimates for 2023–24.[21] We have updated the 2022–23 capex input in our final decision PTRM to reflect the actual capex

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17 EII Chapter 6A, cl. 6A.14.1(5E).

18 AER, *Draft decision: Transgrid 2024-29 - WSB project (Non-contestable) - Appendix A - Assessment approaches,* September 2023, pp. 5–9.

19 Our final decision opening RAB is $0.05 million higher than Transgrid's revised proposal as we have updated the actual and estimated pre-period capex inputs for most recently available date. However, this difference cannot be observed when rounding the amounts to 1 decimal place.

20 Transgrid did not propose an equivalent adjustment for pre-period year 2 (2023-24) because inflation outcomes for 2023–24 are not yet known.

21 Transgrid, *Response to AER information request #07*, 20 November 2023.

incurred by Transgrid for that year based on its audited data. We have also updated Transgrid's estimate for 2023–24 capex which reflects the most recent data available to Transgrid at the time of making this final decision. These updates have increased Transgrid's opening RAB as at 1 July 2024 by $0.05 million. We note that the financial impact of any difference between actual and estimated capex for 2023–24 will be accounted for at the next determination.

6.1.2 Forecast closing RAB as at 30 June 2029

For this final decision, we approve a forecast closing RAB value of $258.7 million by 30 June 2029 for Transgrid, which represents an increase of $0.3 million (0.1%) to Transgrid's revised proposal. The increase reflects our final decision on the inputs for the expected inflation rate and rate of return which are higher than Transgrid's revised proposal (section 7).

Table 6.1 sets our final decision on the forecast RAB values for Transgrid over the 2024–29 period.

Table 6.1 AER's final decision on Transgrid's RAB for the 2024–29 regulatory control period ($ million, nominal)

	2024–25	2025–26	2026–27	2027–28	2028–29
Opening RAB	105.5	247.0	263.6	262.3	260.6
Capital expenditure[a]	138.4	14.3	0.0	0.0	0.0
Inflation indexation on opening RAB	3.1	7.2	7.6	7.6	7.6
Less: straight-line depreciation[b]	0.0	4.9	9.0	9.3	9.5
Closing RAB	**247.0**	**263.6**	**262.3**	**260.6**	**258.7**

Source: AER analysis.

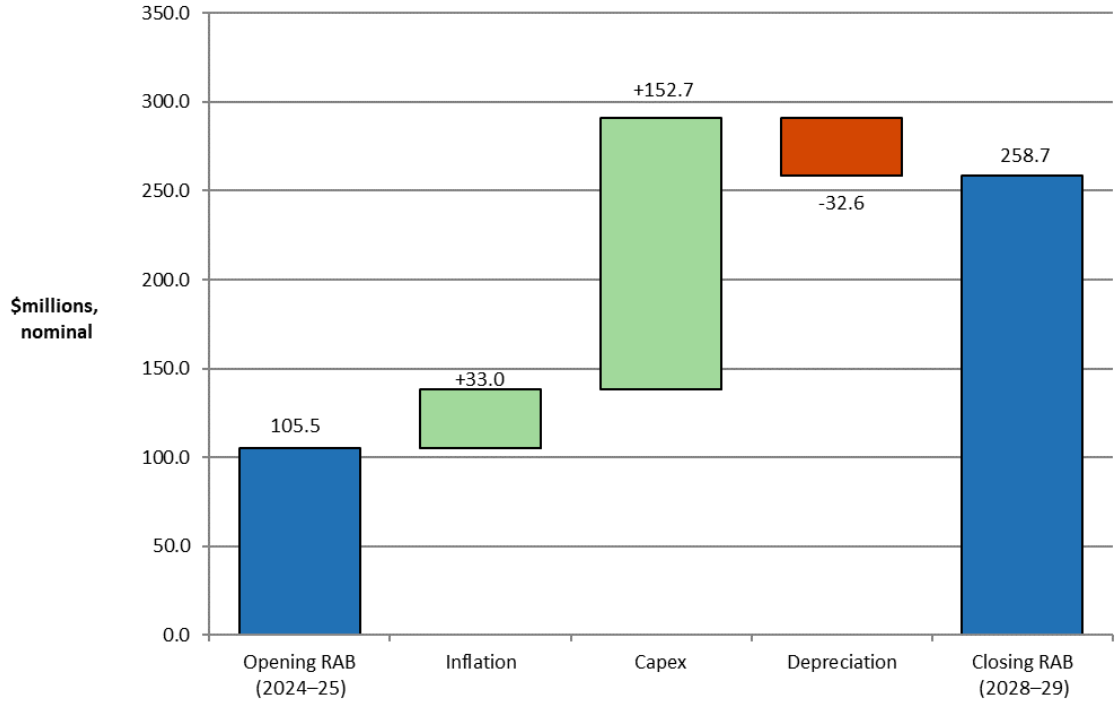
(a) As incurred, and net of forecast disposals. In accordance with the timing assumptions of the PTRM, the capex includes a half-year WACC allowance to compensate for the six-month period before capex is added to the RAB for revenue modelling.

(b) Based on as-commissioned capex.

The change in the size of the RAB over the 2024–29 period depends on our assessment of its various components including forecast capex (section 9), expected inflation (section 7) and forecast depreciation (section 8). Inflation and capex increase the RAB, while depreciation and asset disposals reduce it.

Figure 6.1 shows the key drivers of the change in Transgrid's RAB over the 2024–29 period for this final decision. Overall, our final decision closing RAB at the end of the 2024–29 period is forecast to be $153.1 million (+145%) higher than the opening RAB at the start of that period, in nominal terms. The approved forecast net capex is the largest factor behind the increase, more than doubling the opening RAB. This reflects the scale of capex in the initial build phase of the WSB project.

Figure 6.1 Key drivers of changes in the final decision RAB ($ 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.

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

Consistent with our draft decision,[22] we approve that the depreciation approach to be applied to Transgrid's opening RAB at the commencement of the 2029–34 period will be based on the depreciation schedules (straight-line) using forecast capex at the asset class level approved for the 2024–29 period. We consider this approach will provide sufficient incentives for Transgrid to achieve capex efficiency gains over the 2024–29 period.[23]

As discussed in section 12, we will apply the CESS to Transgrid over the 2024–29 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.[24]

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22 AER, *Draft decision: Transgrid 2024-29 - WSB project (Non-contestable)*, September 2023, pp. 25–26.

23 EII Chapter 6A, cll. 6A.14.1(5E) and S6A.2.2B.

24 Our ex-post capex measures are set out in the capex incentives guideline, AER, *Capital expenditure incentive guideline for electricity network service providers*, April 2023, pp. 13–19 and 20–21. The guideline also sets out how all our capex incentive measures are consistent with the capex incentive objective.

7 Rate of Return

This section sets out our final decision on the rate of return for Transgrid's regulatory control period, as well as the value of imputation credits and the pre-period rate of return. We calculate the regulated return on capital building block by applying a rate of return to the value of the RAB.

We estimate the rate of return by combining the returns of the two sources of funds for investment: equity and debt. The allowed rate of return provides the business with a return on capital to service the interest on its loans and give a return on equity to investors.

We also make an estimate of expected inflation over the next 5 years. Alongside our nominal estimate of the rate of return, these determine the effective real return that will be provided to investors over time.

Our assessment approach for making this final decision is consistent with our draft decision and is set out in in section 3 of Appendix A to our draft decision. [25]

7.1 AER final decision

For this final decision, we apply the current 2022 Instrument,[26] consistent with our draft decision and the requirements of the EII Act.[27] The 2022 Instrument specifies how we will estimate:

- the return on debt
- the return on equity
- the overall rate of return
- the value of imputation credits.

Our final decision estimates an allowed rate of return of 7.01% (nominal vanilla) through the application of the 2022 Instrument to Transgrid's revised proposal for the 2024–29 regulatory control period.

The 2022 Instrument allows Transgrid to nominate averaging periods for the return on debt and the risk-free rate (used for the return on equity). Transgrid has already nominated these periods, but the time periods available for selection could be before or after this final decision.[28] As discussed in our draft decision,[29] to preserve confidentiality over Transgrid's nominated averaging periods, we have included a mechanism in the PTRM to allow us to adjust revenues to true up for any rate of return not known at the time of the final decision. Our decision to develop a mechanism to incorporate later averaging periods under the EII

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[25] AER, *Draft decision: Transgrid 2024-29 - WSB project (Non-contestable) - Appendix A - Assessment approaches,* September 2023, pp. 10–12.

[26] AER, *Rate of return instrument*, February 2023 (version 1.1 as amended August 2023). See https://www.aer.gov.au/publications/guidelines-schemes-models/rate-of-return-instrument-2022/final-decision.

[27] EII Chapter 6A, cl. 6A.6.2.

[28] This is a consequence of the EII framework requiring a much earlier final decision date than the equivalent NER final decision.

[29] AER, *Draft decision: Transgrid 2024-29 - WSB project (Non-contestable)*, September 2023, p. 29.

framework should not be viewed as confirming that Transgrid has nominated periods of this type. Even if it is not used in this case, it will be relevant to any later decisions under the EII framework and so provide for Network Operators to select from the full set of permissible averaging periods under the 2022 Instrument.

We will update the return on debt component of the rate of return each year, in accordance with the 2022 Instrument, to use a 10-year trailing average portfolio return on debt that is rolled-forward each year. Hence, only 10% of the return on debt is calculated from the most recent averaging period, with 90% from prior periods. As set out in our draft decision, 2024–25 will be the first time a trailing average will be applied to Transgrid's WSB project and therefore 100% weighting will be given to the single return on debt estimate at the time of this final decision. We will then gradually transition the WSB RAB into the full trailing average portfolio across 10 years of annual updates.[30]

Consequently, our final decision on the rate of return in Table 7.1 will apply to the first year of the 2024–29 period. A different rate of return may apply for the remaining regulatory years of the 2024–29 period.

Table 7.1 Final decision on Transgrid's rate of return ($ nominal)

	AER's draft decision/ Transgrid revised proposal (2024–29)	AER's final decision	Allowed return over the regulatory control period
Nominal risk-free rate	3.76%[a]	4.27%[c]	
Market risk premium	6.2%	6.2%	
Equity beta	0.6	0.6	
Return on equity (nominal post-tax)	7.48%	7.99%	Constant (%)
Return on debt (nominal pre-tax)	6.35%[b]	6.37%[c]	Updated annually
Gearing	60%	60%	Constant (60%)
Nominal vanilla WACC	6.80%[ab]	7.01%[c]	Updated annually for return on debt
Expected inflation	2.80%	2.90%	Constant (%)

Source: AER analysis.

(a) Calculated using a placeholder averaging period of 20 business days between 17 February and 16 March 2023.

(b) Calculated using a placeholder averaging period of 10 business days between 5 and 16 December 2022.

(c) Calculated using different averaging periods to the draft decision.

Consistent with our draft decision, our final decision is also to:

[30] AER, *Draft decision: Transgrid 2024-29 - WSB project (Non-contestable)*, September 2023, pp. 29–30.

- accept Transgrid's proposed risk-free rate averaging period[31] and debt averaging periods because they comply with the conditions set out in the 2022 Instrument.[32] We specified these averaging periods in confidential Appendix D of our draft decision.
- apply a value of imputation credits (gamma) of 0.57 as specified in the 2022 Instrument.[33]

7.1.1 Pre-period rate of return

The pre-period WACC is used to capitalise Transgrid's pre-period expenditure to form an opening RAB at the start of its regulatory control period. Our final decision is to apply the yearly WACCs from Transgrid's NER final decisions, updated for actual inflation, in rolling forward the pre-period capex to determine an opening RAB.[34]

Our draft decision applied the WACC that we approved in the NER final decisions for Transgrid for each of the relevant years.[35] That is,

- 5.75% for 2022–23, consistent with our 2022–23 return on debt update[36] for the 2018–23 final decision for Transgrid's transmission determination under the NER.
- 5.77% for 2023–24, consistent with our 2023–28 final decision for Transgrid's transmission determination under the NER.[37]

Transgrid's revised proposal accepted our draft decision principle to apply the WACC from our NER determinations to pre-period capex incurred for the WSB project. However, it submitted that the nominal WACC applied in the pre-period years should be updated for actual inflation. Transgrid's revised proposal therefore applied a pre-period WACC of 11.31% for 2022–23, by removing expected inflation from the 2022–23 nominal WACC and replacing it with 2022–23 actual inflation.[38]

Transgrid submitted that its revised proposal approach is consistent with the AER's NER regulatory framework which seeks to achieve a real rate of return for Network Operators.[39] It stated that the AER's standard approach is to roll-forward the RAB by adjusting the allowed WACC for actual inflation.[40]

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31 Transgrid, *Revenue proposal 2024–29 – WSB (non-contestable) – Nominated Averaging Periods – CONFIDENTIAL*, 30 June 2023, p. 2.

32 Transgrid, *Revenue proposal 2024–29 – WSB (non-contestable) – Nominated Averaging Periods – CONFIDENTIAL*, 30 June 2023, pp. 2–3.

33 AER, *Rate of return Instrument, Explanatory Statement*, February 2023, pp. 240–250.

34 Our final decision has updated the nominal WACC for 2022–23 with actual inflation. We will further update the 2023–24 nominal WACC for actual inflation prior to the revenues and schedule of payments being set for 2024–25, the first year of the regulatory control period.

35 AER, *Draft decision: Transgrid 2024-29 - WSB project (Non-contestable)*, September 2023, pp. 30–33.

36 AER, *TransGrid 2018–23 – Final decision – PTRM – 2022-23 return on debt update*, January 2022.

37 AER, *Transgrid 2023–28 – Final decision – PTRM*, April 2023.

38 Transgrid did not propose an equivalent adjustment for pre-period year 2 (2023–24) because Inflation outcomes for 2023–24 are not yet known.

39 Transgrid, *Response to AER information request #06*, 10 November 2023.

40 A nominal WACC of 11.31% was used to roll-forward the 2022-23 actual capex in the recent 2023–28 NER determination for Transgrid. AER, *Transgrid 2023-28 - Final Decision – RFM*, April 2023.

We consider there is merit in preserving consistency with this aspect of the NER framework and targeting a real rate of return. We have accepted the pre-period WACC of 11.31% for 2022–23 in our final decision.

7.1.2 Expected inflation rate

Our estimate of expected inflation included in this final decision is 2.90% (Table 7.2) based on the approach adopted in our final position paper from our 2020 Inflation Review.[41]

Transgrid's proposal and revised proposal adopted our current approach for estimating expected inflation.[42] Our final decision therefore updates the relevant inputs for the latest information available at the time of this final decision.

Table 7.2 Final decision on Transgrid's forecast inflation (%)

	Year 1	Year 2	Year 3	Year 4	Year 5	Geometric average
Expected inflation	3.30%	3.10%	2.90%	2.70%	2.50%	2.90%

Source: AER Analysis; RBA, *Statement on Monetary Policy*, November 2023, Table 1: Forecast Table. See https://www.rba.gov.au/publications/smp/2023/nov/forecasts.html.

7.1.3 Imputation credits

Our final decision applies a value of imputation credits (gamma) of 0.57 as set out in the 2022 Instrument.[43] This is consistent with the value included in Transgrid's revised proposal and our draft decision.

7.1.4 Debt and equity raising costs

In addition to compensating for the required rate of return on debt and equity, we provide an allowance for the transaction costs associated with raising debt and equity.

We include debt raising costs in the opex forecast because these are regular and ongoing costs which are likely to be incurred each time service providers refinance their debt. On the other hand, we include equity raising costs in the capex forecast because these costs are only incurred once and would be associated with funding the particular capital investments. Our final decision forecasts for debt and equity raising costs are included in the PTRM.

Transgrid's revised proposal calculated $0.71 million in equity raising costs in the PTRM, using the approach set out in the model. We have updated our estimate for the 2024–29 period based on the benchmark approach using updated inputs. This results in equity raising costs of $0.65 million.

Transgrid's revised proposal calculated debt raising costs using an annual rate of 8.28 basis points per annum, consistent with our draft decision. While our final decision has updated the debt raising costs unit rate to 8.80 basis points per annum, there is no consequential change in revenue as we have accepted Transgrid's revised proposal total opex (section 10)

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41 AER, *Final position – Regulatory treatment of inflation*, December 2020.

42 Transgrid, *Revenue proposal 2024–29 – WSB (non-contestable)*, June 2023, p. 81.

43 AER, *Rate of return Instrument, Explanatory Statement*, February 2023, pp. 240–250.

inclusive of its debt raising costs. Therefore, our final decision includes debt raising costs of $0.5 million, consistent with Transgrid's revised proposal.

8 Depreciation

Depreciation is the amount provided so capital investors recover their investment over the economic life of the asset (return of capital). In deciding whether to approve the depreciation schedules submitted by Transgrid, we make determinations on:

- the indexation of the RAB and depreciation building blocks for the regulatory control period[44]
- the capability for the Network Operator to efficiently obtain finance to carry out the network infrastructure project.[45]

The regulatory depreciation amount is then calculated as the net total of the straight-line depreciation less the indexation of the RAB.[46]

This section sets out our final decision on Transgrid's regulatory depreciation amount, proposed depreciation schedules and asset lives used for calculating the straight-line depreciation. Our assessment approach for making this final decision is consistent with our draft decision and is set out in section 4 of Appendix A of our draft decision.[47]

8.1 AER final decision

Our final decision is to approve a regulatory depreciation amount of $–0.4 million (nominal) for Transgrid over the 2024–29 period. As this is a negative amount, its effect is to reduce the total revenue calculated through adding up the other building blocks. This is $0.1 million lower than Transgrid's revised proposal of $–0.3 million, due to our final decision updating the rate of return for the latest available data. Table 8.1 below sets out our final decision.

Table 8.1 AER's final decision regulatory depreciation for the 2024–29 regulatory control period ($ million, nominal)

	2024–25	2025–26	2026–27	2027–28	2028–29	Total
Straight-line depreciation	0.0	4.9	9.0	9.3	9.5	32.6
Less: inflation indexation on opening RAB	3.1	7.2	7.6	7.6	7.6	33.0
Regulatory depreciation	**–3.1**	**–2.3**	**1.3**	**1.6**	**2.0**	**–0.4**

Source: AER analysis.

In coming to our final decision, we have accepted all aspects of Transgrid's revised proposal on regulatory depreciation, which in turn adopted all aspects of our draft decision. This includes:

- the use of the straight-line depreciation methodology as set out in our PTRM for depreciating the RAB and determining a forecast depreciation schedule.

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44 EII Chapter 6A, cll. 6A.5.4(a)(1) & (3) & 6A.14.1.

45 EII Chapter 6A, cl. 6A.6.3(d).

46 EII Chapter 6A, cl. S6A.2.4(c).

47 AER, *Draft decision: Transgrid 2024-29 - WSB project (Non-contestable) - Appendix A - Assessment approaches,* September 2023, pp. 13-17.

- the standard and remaining asset lives as at 1 July 2024.
- the reversing of all financeability-related amendments to the PTRM, including removal of a financeability asset class for accelerated depreciation purposes as well as ensuring depreciation begins once an asset has been commissioned, rather than when expenditure has been incurred.

8.1.1 Standard and remaining asset lives

Our final decision's standard and remaining asset lives are consistent with Transgrid's revised proposal, which has adopted our draft decision position. Our draft decision accepted Transgrid's initial proposed asset classes, as well as the standard life for the new asset class 'SIPS control', but we did not accept the 'financeability' asset class and its associated remaining life.

8.1.2 Financeability

Under the EII framework, we must make modifications to any depreciation schedule, if we are satisfied that it is reasonably necessary to ensure the revenue determination is consistent with the principles specified in the EII Act[48] and the Network Operator is capable of efficiently obtaining finance to carry out the network infrastructure project.[49] This capability to efficiently obtain finance is what is commonly known as 'financeability'. Transgrid's initial proposal contained a number of modifications to the AER's standard PTRM to address what Transgrid considered to be cashflow issues related to financeability.

Our final decision maintains our draft decision's position in determining that there is no financeability-related issue for Transgrid in relation to the WSB project, consistent with Transgrid's revised proposal.

Our draft decision did not accept Transgrid's initial proposal regarding modifications to the forecast depreciation schedule for financeability. In particular, our draft decision did not accept that Transgrid's proposed 'financeability test' was an appropriate measure for demonstrating financeability concerns for a network operator.[50] This was because the proposed approach:

- took an unreasonably narrow scope in assessing the WSB cashflows in isolation from broader EII and NER cashflows.
- looked at a limited set of quantitative metrics in a prescriptive manner, without sufficient regard for a broader set of quantitative and qualitative factors.

As a consequence, our draft decision reversed the modifications made by Transgrid in its initial proposal to address financeability concerns, which were:

- recognising depreciation of assets on an as incurred, rather than an as commissioned basis.

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48 EII Act, s.3(1)(a) – (c).

49 EII Regulation, cl. 47D(3)(b); EII Chapter 6A, cl. 6A.6.3(d).

50 Section 7 of our draft decision sets out detailed reasoning on our position on financeability.

- creating a new 'financeability asset' asset class to bring forward cashflows and shape the forecast depreciation schedule.

Transgrid's revised proposal calculates a forecast depreciation schedule consistent with our draft decision, which removed all financeability-related changes. However, Transgrid's revised proposal states that it has 'adopted', rather than accepted, our draft decision position on this issue. This is because Transgrid considered that the AER's draft decision reasoning pointing out the unique characteristics of the WSB project and the size relative to other projects within the AEMO's Integrated System Plan (ISP) to be specific to the WSB project. Transgrid stated that it continues to maintain its initial proposal concerns around financeability for other ISP Projects.

We also note that the AEMC is currently undertaking a rule change process with regards to accommodating financeability in the NER regulatory framework.[51] We will continue to monitor this process and any implications for considering financeability concerns in subsequent decisions made under the EII framework.

[51] An outline of the rule change request and other relevant documents are available on the AEMC website at https://www.aemc.gov.au/rule-changes/accommodating-financeability-regulatory-framework.

9 Capital Expenditure

Capex refers to investment made for the development and construction of network infrastructure. This investment mostly relates to assets with long asset lives (30-50 years), the costs of which are recovered over several regulatory periods. On an annual basis, the financing and depreciation costs (return of capital and return on capital) associated with these assets are recovered as part of the building blocks that form Transgrid's total revenue cap. [52]

This section sets out our final decision on capex. Our assessment approach for making this final decision is consistent with our draft decision and is set out in section 5 of Appendix A of our draft decision. [53]

9.1 AER final decision

Our final decision is to accept a forecast capex amount of $250.7 million ($ 2023–24) for Transgrid for the WSB project. This includes pre-period capex of $105.5 million over 2022–24 and forecast capex of $145.2 million for the 2024–29 regulatory period.

While Transgrid's revised proposal accepted our draft decision, we have made the following minor updates for our final decision:

- updated 2022–23 estimated capex in the revised proposal with actual capex submitted by Transgrid with its audited regulatory information notice
- updated 2023–24 forecast capex in the revised proposal with the latest estimates available to Transgrid
- updated the equity raising costs based on the benchmark approach in the PTRM.

We consider this forecast to be prudent, efficient, and reasonable. A summary of the approved capex by asset class is set out below (see Table 9.1).

Table 9.1 AER's final decision on Transgrid's capex ($ million, 2023–24)

Capex asset class	Pre-period		Regulatory period					Total
	2022–23	2023–24	2024–25	2025–26	2026–27	2027–28	2028–29	
Transmission lines	3.0	32.7	56.0	-	-	-	-	91.7
Substations	5.7	52.0	72.8	13.3	-	-	-	143.7
SIPS control	3.8	8.3	2.5	-	-	-	-	14.6
Equity raising costs	-	-	0.6	-	-	-	-	0.6
Total costs	**12.5**	**93.0**	**131.9**	**13.3**	**-**	**-**	**-**	**250.7**

Source: AER analysis

[52] EII Chapter 6A, cl. 6A.5.4(a).

[53] AER, *Draft decision: Transgrid 2024-29 - WSB project (Non-contestable) - Appendix A - Assessment approaches,* September 2023, p. 18.

9.1.1 Transmission lines augex

The transmission lines augmentation expenditure refers to the cost of increasing the transfer capacity of the 3/4L, 5 and 39 lines of the transmission network connecting the northern and southern regions of NSW to the load centres of Sydney, Newcastle, and Wollongong. This includes the installation of new tower structures, installation of D and V strings, and strengthening the existing tower structures. The transmission lines will also require insulator modification, which will use high voltage insulators procured by Transgrid. The cost for this component was procured by Transgrid, through a competitive procurement exercise, which we have assessed as likely to reflect prudent, efficient and reasonable costs.

9.1.2 Substations

Substation augmentation involves installing high voltage equipment (circuit breakers, transformers, and line traps) to accommodate the increased transfer of the transmission lines across 22 substations. The cost for this component was procured by Transgrid, through a competitive procurement exercise, which we assessed as likely to reflect prudent, efficient and reasonable costs.

9.1.3 SIPS Control

The SIPS control costs include the design and installation of the IT and communications system that links the battery service and the paired generators to the SIPS control centre. It requires the installation of monitoring and detection equipment along the network, communications equipment at the battery and paired generator sites and the testing of the system.

10 Operating Expenditure

Opex is the expenditure incurred by Transgrid to operate and deliver the WSB project. It includes the operating, maintenance and other non-capital associated expenses. Forecast opex is one of the inputs used to determine Transgrid's annual revenue requirement.

This section sets out our final decision for opex. Our assessment approach for making this final decision is consistent with our draft decision and is set out in section 5 of Appendix A of our draft decision.[54]

10.1 AER final decision

Our final decision is to accept $25.0 million ($ 2023–24) in opex for Transgrid for the WSB project. This includes $3.3 million ($ 2023–24) in pre-period opex costs as well as $21.6 million ($ 2023–24) for the forecast 2024–29 regulatory period.

Transgrid's revised proposal for opex accepted all aspects of our draft decision. We have made a minor update to the pre-period opex for our final decision due to our final decision on the pre-period WACC (see section 7.1.1 above).

We consider this forecast to be prudent, efficient, and reasonable. A summary of the approved opex by category is set out below (see Table 10.1).

Table 10.1 AER's final decision on Transgrid's forecast opex by category ($ million, 2023–24)

Opex Category	Pre-period		Regulatory Period					TOTAL
	2022-23	2023-24	2024-25	2025-26	2026-27	2027-28	2028-29	
Maintenance costs	-	-	-	0.3	0.8	0.6	0.3	2.1
Operating Costs	3.3	-	2.2	3.7	3.6	3.8	3.7	20.3
Insurance Costs	-	-	0.3	0.3	0.3	0.3	0.3	1.7
Real input cost escalation	-	-	0.0	0.1	0.1	0.1	0.1	0.5
Debt raising costs	-	-	0.1	0.1	0.1	0.1	0.1	0.5
Total	**3.3**	**-**	**2.6**	**4.5**	**4.9**	**5.0**	**4.6**	**25.0**

Source: AER analysis.

10.1.1 Maintenance Costs

The maintenance costs category refers to costs associated with conducting inspections or services, conducting repairs, or replacing existing equipment, where the size, type or extent

[54] AER, *Draft decision: Transgrid 2024-29 - WSB project (Non-contestable) - Appendix A - Assessment approaches,* September 2023, p. 18.

of facilities are not changed, extended, or increased. The maintenance costs of this project are for the following activities:

- warranty inspections for substations
- end of defects liability period transmission line inspections, and
- annual testing of the SIPS control system.

The forecast costs associated with the warranty and end of defects inspections are consistent with the equivalent accepted costs of comparable contingent projects such as the Queensland-NSW interconnector.

10.1.2 Operating Costs

Operating costs are a broad category of costs related to operating the Waratah Super Battery. It refers to the costs of Transgrid meeting its contractual obligations as the Network Operator and operating the Waratah Super Battery. It consists of the costs associated with:

- contract management,
- network planning,
- network operations,
- a one off contractual payment, and
- regulatory submissions.

The contract management costs refer to the cost of the labour required to manage Transgrid's obligations under the various contracts associated with delivering the WSB project. These include:

- Network Operator Deed (the contractual arrangement between Transgrid and EnergyCo),
- Paired Generation Service Agreements (the contractual arrangements between Transgrid and each generator)
- the SIPS (Battery) service agreement (the contractual arrangements between Transgrid and the battery service provider), and
- regulatory submissions.

Network planning and operations refers to monitoring and updating the SIPS control service. Regulatory submissions refer to preparing annual and ad hoc adjustment proposals during the regulatory period and the revenue proposal for the subsequent regulatory period. The one-off contractual payment is a contractual obligation on Transgrid to pay EnergyCo a Network Operator fee. The fee was paid in June 2023.

After reviewing the labour requirements and costs of each of these components, we have approved $20.3 million ($ 2023-24) which is unchanged from our draft decision.

10.1.3 Pre-period operating costs

The pre-period operating costs refer to a contractual payment Transgrid is required to make to EnergyCo, under the Network Operator Deed. Transgrid is entitled to recover payments

required to be made to EnergyCo under the Network Operator Deed as Transgrid was required to enter into this contractual arrangement under the relevant authorisation.[55]

10.1.4 Insurance Costs

Insurance costs refer to the cost of insuring the Waratah Super Battery assets, once commissioned. It refers to the insurance premiums Transgrid is required to pay. Transgrid's approach to forecasting these costs is consistent with the approved equivalent method of forecasting these costs used in comparable contingent projects.

10.1.5 Real input cost escalation

Real input cost escalation refers to the increase in costs over time associated with specific inputs, which in this case is labour. Transgrid has used the cost escalation method provided by the AER for Transgrid's 2023-28 NER revenue determination, which we have accepted here. It represents the forecast increase in the cost of labour over the regulatory period.

10.1.6 Debt raising costs

Debt raising costs refer to the transaction costs associated with obtaining funds (loans) to finance the construction and operation of the Waratah Super Battery. The costs proposed by Transgrid and accepted as part of our final decision, were estimated using the approach set out in our PTRM guidance note.

[55] EII Regulation, cl. 46(b)(ii).

11 Corporate Income Tax

Our revenue determination includes the estimated cost of corporate income tax for Transgrid's 2024–29 regulatory control period. Under the post-tax framework, the cost of corporate income tax is calculated as part of the building block assessment using our EII PTRM.[56] This amount allows Transgrid to recover the costs associated with the estimated corporate income tax payable during the 2024–29 period.

This section sets out our final decision on the estimated cost of corporate income tax. Our assessment approach for making this final decision is consistent with our draft decision and is set out in section 6 of Appendix A of our draft decision.[57]

11.1 AER final decision

Our final decision on Transgrid's estimated cost of corporate income tax is $0.05 million ($ nominal) over the 2024–29 period. This represents an increase of $0.02 million (53.3%) from Transgrid's revised proposal of $0.03 million. The reasons for this increase are due to our final decisions regarding:

- higher rate of return on equity (section 7)
- lower regulatory depreciation amount (section 8).

Table 11.1 sets out our final decision on the estimated cost of corporate income tax for Transgrid over the 2024–29 period.

Table 11.1 AER's final decision on Transgrid's cost of corporate income tax for the 2024–29 period ($ million, nominal)

	2024–25	2025–26	2026–27	2027–28	2028–29	Total
Tax payable	0.11	-	-	-	-	0.11
Less: value of imputation credits	0.06	-	-	-	-	0.06
Net cost of corporate income tax	**0.05**	**-**	**-**	**-**	**-**	**0.05**

Source: AER analysis.

Our final decision calculates tax losses for Transgrid between 2025–26 and 2028–29, therefore we have calculated a cost of corporate income tax of zero for these years. This is because the WSB project is a new transmission program, and therefore total tax expenses outweigh taxable revenues.

Our final decision forecasts a total tax loss of $13.3 million ($ nominal) at the end of the 2024–29 period.[58] This will be carried forward to Transgrid's following regulatory control period and offset against future tax payable amounts.

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[56] EII Chapter 6A, cl. 6A.6.4.

[57] AER, *Draft decision: Transgrid 2024-29 - WSB project (Non-contestable) - Appendix A - Assessment approaches,* September 2023, pp. 19–23.

[58] This is the sum of tax losses across the final 4 years (2025–29) of the period.

Transgrid's revised proposal accepted the draft decision elements relating to tax in full.[59] Our final decision maintains our draft decision position on Transgrid's opening tax asset base and standard tax asset lives for the 2024–29 period.[60]

[59] Transgrid, *Revised revenue proposal 2024–29 – WSB (non-contestable) – PTRM*, November 2023.

[60] AER, *Draft decision: Transgrid 2024-29 - WSB project (Non-contestable)*, September 2023, pp. 56-57.

12 Incentive Schemes

Incentive schemes provide financial rewards to Network Operators who maintain or improve their performance standards or manage their expenditure efficiently. The schemes also apply penalties to Network Operators that don't meet performance standards or manage their expenditure inefficiently.

Three incentive schemes are in-scope for application to the non-contestable components of the WSB project:

- the Service Target Performance Incentive Scheme (STPIS) provides a financial incentive for Network Operators to maintain and improve service performance.
- the Efficiency Benefit Sharing Scheme (EBSS) provides financial incentives to Network Operators to manage its operating expenditure within its approved allowance.
- the Capital Expenditure Sharing Scheme (CESS) provides financial incentives to Network Operators to manage its capital expenditure within its approved allowance.

This section sets out our final decision on the incentive schemes to apply for the 2024–29 regulatory control period. Our assessment approach and detailed description of our considerations and decision is set out in our draft decision (section 11).[61]

12.1 AER final decision

Our final decision is consistent with our draft decision. That is:

- we will not apply the STPIS to this project for the first regulatory period.
- we will decide on whether to apply the EBSS to this project at the end of the first regulatory period.
- we will apply the CESS to this project for the 2024–29 regulatory period.

Transgrid accepted our decisions regarding the STPIS and EBSS in its revised proposal and agreed to *adopt* our decision regarding the CESS.

12.1.1 STPIS

The STPIS is not able to be applied to non-contestable revenue determinations under the EII Act in the initial regulatory period. As this project concerns new infrastructure and a new service, there is no performance information available upon which to develop performance standards. Instead, the contractual arrangements between Transgrid and EnergyCo (the Network Operator Deed) stipulate service level standards with attached financial penalties. Meanwhile, we will collect information during the initial regulatory period to develop a STPIS for potential application in the next regulatory period.

12.1.2 EBSS

We will make a decision on whether to apply the EBSS to this project at the end of the regulatory period, as there is no historical opex upon which to base forecasts. When

[61] AER, *Draft decision: Transgrid 2024-29 - WSB project (Non-contestable)*, September 2023, pp. 58-61.

considering whether to apply the scheme, we will have regard to the factors set out in EII Chapter 6A, cl. 6A.6.5(b) including:

- the need to provide Network Operators with a continuous incentive to reduce opex
- the desirability of both rewarding Network Operators for efficiency gains and penalising Network Operators for efficiency losses
- any incentives that Network Operators may have to inappropriately capitalise operating expenditure;
- the principles in s. 37 of the EII Act and clause 46(1)(b) of the EII Regulation.

This decision will appear in the revenue determination for the next regulatory period.

12.1.3 CESS

Our draft decision noted we considered the decision to apply the CESS to this project to be finely balanced, with the cases to apply and not apply the CESS to both have merit.[62] We sought submissions from interested stakeholders to inform our final decision. We received three submissions which supported the application of the CESS to this project.

The Energy Users Association of Australia (EUAA) submission stated:

"Notwithstanding the existence of the Network Operator Deed, the EUAA strongly supports the inclusion of CESS in revenue determinations of this nature as an important tool to mitigate project overspend."[63]

The submission from our Consumer Challenge Panel member stated:

"We have reviewed the AER's Draft Decision to apply the CESS to this proposal. We accept the AER's reasoning that applying the CESS to this project creates the best chance of reducing the cost of the project to consumers and is consistent with the capital expenditure objective. Given the opaqueness of the Network Operator Deed, we would strengthen the AER's argument that we believe application of the CESS could help increase badly needed transparency on project outcomes and commercial arrangements, and that is a further reason to support application of the CESS to this project." [64]

The Public Interest Advocacy Centre (PIAC) submission stated:

"PIAC does not support Transgrid's proposal to waive the Capital Expenditure Sharing Scheme (CESS) of the Waratah Super Battery (WSB). The risk of the decision forming a precedent and undermining a key pillar of consumer protection in the transmission investment regulatory regime is substantial. On the other hand, the possibility of an

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62 AER, *Draft decision: Transgrid 2024-29 - WSB project (Non-contestable)*, September 2023, p. 61.

63 EUAA, *Submission on AER's draft decision and Transgrid's revised proposal for WSB project (non-contestable)*, 24 November 2023, p. 2, paragraph 1.

64 CCP, *Submission on AER's draft decision and Transgrid's revised proposal for WSB project (non-contestable)*, 24 November 2023, p.13, section 4.4.3.

underspend – and potential for benefit to consumers – is very small. The substantial risks far outweigh any potential benefits to consumers in this scenario."[65]

With the support of our stakeholders, we maintain our position that Transgrid is likely to have enough influence over the capex of the project, that if the opportunity for a capex underspend arises, it's more likely to be achieved with Transgrid's actions than without it. As such, we consider applying the CESS to this project creates the best chance of reducing the cost of the project to consumers and is consistent with the capex objective.

[65] PIAC, *Submission on AER's draft decision and Transgrid's revised proposal for WSB project (non-contestable)*, 24 November 2023, p. 1, paragraph 2.

13 Adjustment mechanisms

Adjustment mechanisms are pre-defined circumstance that allow a Network Operator to request the adjustment of any amount set out in a revenue determination. These mechanisms are intended to accommodate material changes in a Network Operator's costs that can occur during the regulatory period.

Transgrid proposed 16 adjustment mechanisms in its initial proposal. We accepted them in our draft decision with some modifications. This section sets out our final decision on the adjustment mechanisms to apply for the 2024-29 regulatory control period. The precise wording of each mechanism is contained in our draft decision (see Appendix C of our draft decision), alongside the reasons for our decision (see section 12 of our draft decision).[66]

13.1 AER final decision

Our final decision is consistent with our draft decision:

- we have accepted 12 of the adjustment mechanisms as proposed by Transgrid in its initial proposal, and
- accepted four proposed adjustment mechanisms with the amendments we included in our draft decision.

Below is a summary of the adjustment mechanisms included in our final decision.

Table 12.1 Adjustment Mechanisms included in the final decision

Accepted Mechanism	Accepted Definition
Regulatory requirements	Adjustment to account for a change in costs arising from complying with regulatory requirements.
Service standard event	Adjustment to account for a change in costs arising from accommodating service standard event.
Tax change event	Adjustment to account for a change in costs arising from accommodating a tax change event.
Insurance event	Adjustment to account for a change in costs arising from an insurance event.
Inertia shortfall event	Adjustment to account for a change in costs arising from an inertia shortfall event.
Fault level shortfall event	Adjustment to account for a change in costs arising from a fault level shortfall event.
Insurance coverage event	Adjustment to account for a change in costs arising from a change in insurance coverage due to changes in the insurance market.

[66] AER, *Draft decision: Transgrid 2024-29 - WSB project (Non-contestable)*, September 2023, pp. 62-67.

Insurer's credit risk event	Adjustment to account for a change in costs due to an insurer of this project becoming insolvent.
Natural disaster event	Adjustment to account for a change in costs due to a natural disaster.
Terrorism event	Adjustment to account for a change in costs due to a terrorism event.
Updates for actual inflation	Annual updates to revenue to account for actual (as opposed to forecast) inflation.
Update to Return on debt	Adjustment to update the rate of return, using more recent averaging periods.
Additional contractual payments to EnergyCo	Adjustment to account for costs of legislative or regulatory changes that introduce additional payments obligations for Transgrid to EnergyCo.
Paired Generation Costs	Adjustment to account for the costs of connecting generators contracted to deliver paired generation services, as part of the WSB project.
Unavoidable contract variations	Adjustment to account for changes in construction costs due to changes in the final design of the construction work.
Contractor force majeure	Adjustment to account for changes in construction costs incurred due to a force majeure event impacting the construction contractor.

Transgrid accepted these mechanisms of our draft decision in its revised proposal.

We received two submissions that commented on the 'unavoidable contract variation' adjustment mechanisms included in our draft decision. Both submissions supported the inclusion of a cap to the adjustment.

The submission from the EUAA stated:

"The EUAA also does not accept Transgrid's proposal to have an uncapped revenue adjustment mechanism related to "unavoidable contract variations" and supports the AER's draft determination to cap this revenue adjustment mechanism to $30 million."[67]

The submission from our CCP member stated:

"The AER's Draft Decision justifies the introduction of a capex cap (i.e. a maximum cumulative increase) of $30 million for the unavoidable contract variation adjustment mechanism …."

"We have no reason not to support this approach."[68]

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[67] EUAA, *Submission on AER's draft decision and Transgrid's revised proposal for WSB project (non-contestable)*, 24 November 2023, p. 2.

[68] CCP, *Submission on AER's draft decision and Transgrid's revised proposal for WSB project (non-contestable)*, 24 November 2023, p. 8.

14 Submissions

We received four submissions in response to Transgrid's 2024-29 revised proposal for the non-contestable components of the WSB project.

Stakeholder	Received Date
AER's Consumer Challenge Panel (CCP)	24 November 2023
Energy Users Association of Australia (EUAA)	24 November 2023
Public Interest Advocacy Centre (PIAC)	24 November 2023
Energy Australia	24 November 2023

Glossary

Term	Definition or extended form
ABS	Australian Bureau of Statistics
AEMC	Australian Energy Market Commission
AEMO	Australian Energy Market Operator
AER	Australian Energy Regulator.
Augex	Augmentation expenditure
Capex	Capital expenditure
CESS	Capital expenditure sharing scheme
CPI	Consumer price index
Competitive assessment process	The contestable process undertaken by the Infrastructure Planner to select a Network Operator for a Project or to select a person who will assist a Network Operator in carrying out all or part of a Project.
Consumer Trustee	A person or body authorised under section 60 of the EII Act to exercise the functions of the Consumer Trustee. The Consumer Trustee is required to act independently and in the long-term financial interests of NSW electricity consumers. AEMO Services Ltd has been appointed to undertake this role.
Contractual arrangement	Contracts that the Network Operator enters into as required under the Consumer Trustee's authorisation or Minister's authorisation or direction. This includes contracts made between the Infrastructure Planner and the Network Operator for carrying out a network infrastructure project under section 63(4)(a) of the EII Act.
EBSS	Efficiency benefit sharing scheme
EII Act	*Electricity Infrastructure Investment Act 2020* (NSW)
EII Chapter 6A	Appendix A (Economic regulation of NSW non-contestable revenue determination under Part 5 of EII Act) of the Guideline.
EII framework	The EII Act and any regulations made under it.
EII Regulations	*Electricity Infrastructure Investment Regulation 2021* (NSW)
Gamma	Value of imputation credits
Guideline	The *Transmission Efficiency Test and revenue determination guideline for non-contestable network infrastructure projects* prepared and published by the *AER* in April 2023 as updated from time to time.
Infrastructure Planner	A person authorised to exercise the functions of an infrastructure planner under section 63 of the EII Act. The Infrastructure Planner performs a range of planning and contracting functions. The Energy Corporation of NSW has been appointed to undertake this role for the five REZs specified in the EII Act.
ISP	Integrated System Plan
MAR	Maximum allowed revenue
Minister	The New South Wales Minister for Energy
NEL	National Electricity Law as it applies in NSW
NER	National Electricity Rules
Network Operator	Means a person who owns, controls or operates, or proposes to own, control or operate, network infrastructure under the EII Act.
Network Operator Deed	The contractual arrangements between the Network Operator (Transgrid) and the infrastructure planner (EnergyCo).
Opex	Operating expenditure

Term	Definition or extended form
Priority transmission infrastructure project (PTIP)	Has the meaning given to that term in the EII Act.
PTRM	Post-tax revenue model
PTRM guidance note	The *Guidance note – Amendments to the NER PTRM for EII revenue determinations*, prepared and published by the *AER* in June 2023 as updated from time to time.
REZ	Has the meaning given to that term in the EII Act.
RAB	Regulatory asset base
RBA	Reserve Bank of Australia
REZ network infrastructure project (or project)	Has the meaning given to that term in the EII Act.
RIN	Information notice issued to a network operator under s.38(7) of the EII Act.
SFV	A person or body authorised under section 62 of the EII Act to exercise the functions of the Scheme Financial Vehicle.
SIPS	System Integrity Protection Scheme
SIPS Service	A service capable of providing a guaranteed continuous active power capacity of at least 700 MW and a guaranteed useable energy storage capacity of at least 1400 MWh.
TET (Transmission Efficiency Test)	The test to be applied to calculate the prudent, efficient and reasonable capital costs for development and construction of a network infrastructure project under s.38(4) of the EII Act.
Transgrid	NSW Electricity Network Operations Pty Limited (ACN 609 169 959) as trustee for NSW Electricity Networks Operations Trust (ABN 70 250 995 390), trading as Transgrid the Network Operator for the WSB project.
WACC	Weighted average cost of capital
Waratah Super Battery (WSB) project	The Waratah Super Battery project comprising contestable components (SIPS battery service and paired generation services) and non-contestable components (network augmentations and the SIPS control and communications system). This revenue determination relates to the non-contestable components of the WSB project, namely the network augmentation and SIPS control system.