

Draft Decision

ElectraNet Transmission Determination 2023 to 2028

(1 July 2023 to 30 June 2028)

Attachment 2 Regulatory asset base

September 2022

© Commonwealth of Australia 2022

This work is copyright. In addition to any use permitted under the *Copyright Act 1968* all material contained within this work is provided under a Creative Commons Attributions 3.0 Australia licence with the exception of:

- the Commonwealth Coat of Arms
- the ACCC and AER logos
- any illustration diagram, photograph or graphic over which the Australian Competition and Consumer Commission does not hold copyright but which may be part of or contained within this publication.

The details of the relevant licence conditions are available on the Creative Commons website as is the full legal code for the CC BY 3.0 AU licence.

Inquiries about this publication should be addressed to:

Australian Energy Regulator
GPO Box 3131
Canberra ACT 2601
Tel: 1300 585 165

AER reference: 202188

Amendment record

Version	Date	Pages
1	30 September 2022	22

Note

This attachment forms part of the AER’s draft decision on ElectraNet’s 2023–28 transmission determination. It should be read with all other parts of the draft decision.

The draft decision includes the following documents:

Overview

Attachment 1 – Maximum allowed revenue

Attachment 2 – Regulatory asset base

Attachment 3 – Rate of return

Attachment 4 – Regulatory depreciation

Attachment 5 – Capital expenditure

Attachment 6 – Operating expenditure

Attachment 7 – Corporate income tax

Attachment 8 – Efficiency benefit sharing scheme

Attachment 9 – Capital expenditure sharing scheme

Attachment 10 – Service target performance incentive scheme

Attachment 11 – Demand management innovation allowance mechanism

Attachment 12 – Pricing methodology

Attachment 13 – Pass through events

Contents

Note	iii
2 Regulatory asset base	1
2.1 Draft decision.....	1
2.2 ElectraNet’s proposal.....	4
2.3 Assessment approach	6
2.4 Reasons for draft decision	11
Glossary	18

2 Regulatory asset base

The regulatory asset base (RAB) is the value of the assets used by ElectraNet to provide prescribed transmission services.¹ Our revenue determination specifies the RAB as at the commencement of the regulatory control period and the appropriate method for the indexation of the RAB.² The indexation of the RAB is one of the building blocks that form the annual building block revenue requirement for each year of the 2023–28 regulatory control period.³ We set the RAB as the foundation for determining a transmission network service provider’s (TNSP’s) revenue requirements, and use the opening RAB for each regulatory year to determine the return on capital and return of capital (regulatory depreciation) building blocks.⁴

This attachment presents our draft decision on the opening RAB value as at 1 July 2023 for ElectraNet and our forecast of its RAB values over the 2023–28 period. It also presents our draft decision for establishing the RAB as at the commencement of the 2028–33 period using depreciation that is based on forecast capital expenditure (capex).⁵

2.1 Draft decision

We determine an opening RAB value of \$3817.2 million (\$ nominal) as at 1 July 2023 for ElectraNet. This value is \$223.5 million (6.2%) higher than ElectraNet’s proposed opening RAB of \$3593.7 million as at 1 July 2023.⁶ This increase is largely due to the updates we made to the consumer price index (CPI) inputs for 2021–22 and 2022–23 in the roll forward model (RFM) to reflect more up-to-date values:

- We have updated the CPI input for 2021–22 to 3.5%, reflecting the actual value based on the 2021 December quarter CPI published by the Australian Bureau of Statistics (ABS), which became available after ElectraNet submitted its proposal. This compares to ElectraNet’s proposed estimated value of 2.45%. The resulting indexation on the RAB for 2021–22 is \$100.5 million in our draft decision, compared to ElectraNet’s proposed \$70.4 million.
- We have also updated the 2022–23 estimated CPI with the latest Reserve Bank of Australia (RBA) forecast published in its *Statement on Monetary Policy* to reflect the latest economic conditions.⁷ For our draft decision, we adopt an estimated CPI value of 7.8%, compared to ElectraNet’s proposed 2.45%. This higher estimated value results in the indexation of the RAB for 2022–23 to be \$252.5 million, compared to \$79.3 million under ElectraNet’s proposal. This value will be updated again to reflect the actual CPI published by the ABS for our final decision.

¹ NER, cl. 6A.6.1(a).

² NER, cll. 6A.4.2(3A) and (4).

³ NER, cll. 6A.5.4(a)(1) and (b)(1).

⁴ NER, cll. 6A.5.4(a)(2) and (3).

⁵ NER, cl. 6A.14.1(5E).

⁶ ElectraNet, *Attachment 2 – Regulatory asset base*, January 2022, p. 6.

⁷ RBA, *Statement on Monetary Policy, Appendix: Forecasts*, August 2022.

As the RAB must be maintained in real terms by indexing for inflation,⁸ the combined effect of our above amendments to CPI compared to ElectraNet’s proposal is a higher opening RAB value as at 1 July 2023 by \$218.2 million (or 6.1%).

We largely accept ElectraNet’s proposed method for calculating the opening RAB. However, we have made the following changes to ElectraNet’s proposed inputs in the RFM (in addition to the CPI updates discussed above). The net impact of these changes is a further increase of \$5.6 million to the opening RAB value.

- included an estimate of disposal values for 2021–22 and 2022–23 based on additional information provided by ElectraNet
- updated the nominal weighted average cost of capital (WACC) for 2022–23 following the most recent return on debt update in the 2018–23 post-tax revenue model (PTRM)
- removed a residual value from the as incurred closing RAB as at 30 June 2023 to account for assets that have fully depreciated
- included additional final year asset adjustments to reflect the roll-in of capitalised leases due to a change in accounting standards
- corrected some minor inputs in the final year asset adjustment relating to the removal of assets that are no longer providing a prescribed connection service from the RAB
- updated the capex and forecast depreciation inputs related to ‘Equity raising costs’ to reflect the 2022–23 return on debt update PTRM for ElectraNet’s 2018–23 determination.

To determine the opening RAB as at 1 July 2023, we have rolled forward the RAB over the 2018–23 period to determine a closing RAB value at 30 June 2023 in accordance with our RFM.⁹ This roll forward process 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.¹⁰ 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 2023.¹¹

Table 2.1 sets out our draft decision on the roll forward of ElectraNet’s RAB over the 2018–23 period.

⁸ NER, cll 6A.5.4(b)(1) and 6A.6.1(e)(3).

⁹ AER, *Electricity transmission network service providers: Roll forward model (version 4.1)*, May 2022.

¹⁰ The end of period adjustment will be positive (negative) if actual capex is higher (lower) than the estimate approved at the 2018–23 determination.

¹¹ This includes an adjustment for capitalised leases, removal of assets from the RAB due to classification changes, removal of a residual value from the RAB for assets that have fully depreciated and reallocation for accelerated depreciation purposes associated with early replaced assets. Our draft decision on accelerated depreciation is set out in section 4.4.2 of Attachment 4 of this draft decision.

Table 2.1 AER's draft decision on ElectraNet's RAB for the 2018–23 regulatory control period (\$ million, nominal)

	2018–19	2019–20	2020–21	2021–22 ^a	2022–23 ^b
Opening RAB	2560.2	2659.2	2763.6	2872.8	3266.5
Capital expenditure ^c	159.8	181.9	216.6	433.9	416.5
Inflation indexation on opening RAB ^d	45.7	48.9	23.8	100.5	254.8
Less: straight-line depreciation ^e	106.4	126.5	131.2	140.6	139.0
Interim closing RAB	2659.2	2763.6	2872.8	3266.5	3798.8
Difference between estimated and actual capex in 2017–18					17.3
Return on difference for 2017–18 capex					6.1
Final year asset adjustment ^f					-5.0
Closing RAB as at 30 June 2023					3817.2

Source: AER analysis.

- (a) Based on estimated capex provided by ElectraNet. We will update the RAB roll forward with actual capex in the final decision.
- (b) Based on estimated capex provided by ElectraNet. We expect to update the RAB roll forward with a revised capex estimate in the final decision, and true-up the RAB for actual capex at the next reset.
- (c) As incurred, net of disposals, and adjusted for actual CPI and half-year WACC.
- (d) We will update the RAB roll forward for actual CPI for 2022–23 in the final decision.
- (e) Adjusted for actual CPI. Based on forecast as commissioned capex.
- (f) Includes the addition of capitalised leases, removal of a residual value from the as incurred closing RAB as at 30 June 2023 and removal of assets as at 30 June 2023 that do not provide prescribed services.

We determine a forecast closing RAB value as at 30 June 2028 of \$4309.3 million (\$ nominal). This is \$330.1 million (or 8.3%) higher than the amount of \$3979.2 million proposed by ElectraNet. This increase is mainly due to our draft decision on the opening RAB as at 1 July 2023 (discussed in this attachment). Our draft decisions on the expected inflation rate (Attachment 3), forecast depreciation (Attachment 4) and forecast capex (Attachment 5) also affect the forecast closing RAB value as at 30 June 2028.¹²

Table 2.2 sets our draft decision on the forecast RAB values for ElectraNet over the 2023–28 period.

¹² 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 draft decision on the forecast RAB also reflects our amendments to the rate of return for the 2023–28 period (Attachment 3).

Table 2.2 AER's draft decision on ElectraNet's RAB for the 2023–28 regulatory control period (\$ million, nominal)

	2023–24	2024–25	2025–26	2026–27	2027–28
Opening RAB	3817.2	3933.6	4043.6	4142.3	4232.0
Capital expenditure ^a	160.4	166.3	154.3	151.0	134.4
Inflation indexation on opening RAB	114.5	118.0	121.3	124.2	126.9
Less: straight-line depreciation ^b	158.5	174.3	177.0	185.5	184.0
Closing RAB	3933.6	4043.6	4142.3	4232.0	4309.3

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.

We determine that the forecast depreciation approach is to be used to establish the opening RAB at the commencement of the 2028–33 period for ElectraNet.¹³ We consider this approach is consistent with the capex incentive objective in that it will provide sufficient incentives for ElectraNet to achieve capex efficiency gains over the 2023–28 period. This approach is also consistent with our *Framework and Approach* paper.¹⁴

2.2 ElectraNet's proposal

ElectraNet used our RFM to establish an opening RAB as at 1 July 2023 and version 5 of our PTRM to roll forward the RAB over the 2023–28 period.¹⁵

ElectraNet proposed an opening RAB value as at 1 July 2018 of \$2560.2 million (\$ nominal). Rolling forward this RAB and using depreciation based on forecast capex (approved for the 2018–23 period), ElectraNet proposed a closing RAB as at 30 June 2023 of \$3593.7 million (\$ nominal).¹⁶

In rolling forward the RAB, ElectraNet removed \$13.7 million (\$ nominal) in 2022–23 for grandfathered assets that are no longer providing a prescribed connection service.¹⁷ ElectraNet noted that this is due to the connection agreements at these substations being altered at the request of the transmission network user to facilitate the connection of generation. The connection services previously provided at the identified substations will be taken to be a negotiated transmission service for the 2023–28 period and the value of the assets which previously provided the connection services will be removed from the RAB.¹⁸

¹³ NER, cl. S6A.2.2B(a).

¹⁴ AER, *ElectraNet 2023–28 – Framework and approach*, July 2021, p. 26.

¹⁵ We have released a new version of the PTRM (version 5.1) in May 2022 after ElectraNet submitted its revenue proposal. Our draft decision uses this updated version 5.1 PTRM.

¹⁶ ElectraNet, *Attachment 2 – Regulatory asset base*, January 2022, p. 6.

¹⁷ NER, cl. 11.6.11(a).

¹⁸ NER, cl. 11.6.11(d).

For the final year (end of period) asset adjustments,¹⁹ ElectraNet proposed to transfer the value of some decommissioned assets following the completion of an asset replacement or augmentation program from their existing asset classes to a dedicated ‘Accelerated depreciation’ asset class for accelerated depreciation purposes. The transfer of these assets changes the value within each affected asset class but does not change the overall value of the opening RAB as at 1 April 2023.²⁰

Table 2.3 sets out ElectraNet’s proposed roll forward of its RAB during the 2018–23 period.

Table 2.3 ElectraNet’s proposed RAB for the 2018–23 regulatory control period (\$ million, nominal)

	2018–19	2019–20	2020–21	2021–22 ^a	2022–23 ^a
Opening RAB	2560.2	2659.2	2763.6	2872.8	3237.4
Capital expenditure ^b	159.8	181.9	216.6	434.9	392.5
Inflation indexation on opening RAB	45.7	48.9	23.8	70.4	79.3
Less: straight-line depreciation ^c	106.4	126.5	131.2	140.6	137.6
Interim closing RAB	2659.2	2763.6	2872.8	3237.4	3571.6
Difference between estimated and actual capex in 2017–18					17.3
Return on difference for 2017–18 capex					4.8
Closing RAB as at 30 June 2023					3593.7

Source: ElectraNet, *2023–28 Revenue proposal, Roll forward model*, January 2022.

(a) Based on estimated capex.

(b) As incurred, net of disposals, adjusted for actual CPI and half-year WACC.

(c) Adjusted for actual CPI. Based on forecast as commissioned capex.

ElectraNet proposed a forecast closing RAB as at 30 June 2028 of \$3979.2 million (\$ nominal). This value reflects its proposed opening RAB, forecast capex, expected inflation, and depreciation (based on forecast capex) over the 2023–28 period.

Table 2.4 shows its projected RAB over the 2023–28 period.

¹⁹ The final year asset adjustments section in the RFM is primarily for recording asset adjustments at the end of the current regulatory control period. This section is used when the TNSP needs to adjust its closing RAB by removing or adding assets (such as for a change in service classification) in the final year of the regulatory control period.

²⁰ ElectraNet, *2023–28 Revenue proposal, Roll forward model*, January 2022.

Table 2.4 ElectraNet’s proposed RAB for the 2023–28 regulatory control period (\$million, nominal)

	2023–24	2024–25	2025–26	2026–27	2027–28
Opening RAB	3593.7	3691.2	3781.4	3859.1	3925.8
Capital expenditure ^a	157.3	164.7	152.0	147.2	130.8
Inflation indexation on opening RAB	86.2	88.6	90.8	92.6	94.2
Less: straight-line depreciation ^b	146.2	163.0	165.0	173.1	171.6
Closing RAB	3691.2	3781.4	3859.1	3925.8	3979.2

Source: ElectraNet, *2023–28 Revenue proposal, Post-tax revenue model*, January 2022.

- (a) As incurred, and net of forecast disposals. Inclusive of the half-year WACC to account for the timing assumptions in the PTRM.
- (b) Based on as commissioned capex.

2.3 Assessment approach

We roll forward ElectraNet’s RAB during the 2018–23 period to establish the opening RAB at 1 July 2023. This value must be adjusted for any differences in estimated and actual capex.²¹ It may also be adjusted to reflect any changes in the use of the assets. We may include (or remove) assets from the RAB in circumstances where the nature of assets has changed and they are now contributing (or no longer contributing) to the provision of prescribed transmission services.²²

To determine the opening RAB, we developed an asset base RFM that a TNSP must use in preparing its revenue proposal.²³ We used the RFM to roll forward ElectraNet’s RAB from the beginning of the final year of the 2013–18 period,²⁴ through the 2018–23 period, to the beginning of the 2023–28 period.

The roll forward for each year of the above period occurs by:

- adding actual inflation (indexation) adjustment to the opening RAB for the relevant year. This adjustment is consistent with the inflation factors used in the annual indexation of the maximum allowed revenue²⁵
- adding actual or estimated capex to the RAB for the relevant year.²⁶ We review a TNSP’s past capex and may exclude past capex from being rolled into the RAB where total capex exceeds the regulatory allowance.²⁷ The details of our assessment approach

²¹ NER, cl. S6A.2.1(f)(3).

²² NER, cll. S6A.2.1(f)(6)–(8) and S6A.2.3.

²³ NER, cll. 6A.6.1(b), 6A.6.1(e) and S6A.1.3(5).

²⁴ The roll forward commences in the final year of the 2013–18 regulatory control period to allow us to adjust for the difference between actual 2017–18 capex and the estimated 2017–18 capex used in our 2013–18 transmission determination. This adjustment will be positive (negative) if actual capex is higher (lower) than the estimate approved in the 2013–18 determination. See NER, cl. S6A.2.1(f)(3).

²⁵ NER, cl. 6A.6.1(e)(3).

²⁶ NER, cl. S6A.2.1(f)(4).

²⁷ NER, cl. S6A.2.2A. Under the NER, cl S6A.2.2A(b), the exclusion of inefficient capex could only come from three areas: overspend in capex, margin paid to third party and inappropriate capitalisation of opex as defined in cll. S6A.2.2A(c), (d) and (3) of the NER.

for capex overspend are set out in the *Capital expenditure incentive guideline*. We note that our review of past capex does not include the last two years of the 2018–23 period—these will instead be reviewed at the next reset.²⁸ We check actual capex amounts against audited regulatory accounts data and generally accept the capex reported in those accounts in rolling forward the RAB.²⁹ However, there may be instances where adjustments are required to the annual regulatory accounts data³⁰

- subtracting depreciation from the RAB for the relevant year, calculated in accordance with the rates and methodologies allowed (if any) in the transmission determination for ElectraNet’s 2018–23 period.³¹ Depreciation based on forecast or actual capex can be used to roll forward the RAB.³² For this draft decision, we use depreciation based on forecast capex for rolling forward the RAB for ElectraNet’s 2018–23 period.³³ Depreciation based on forecast capex will also be used for the 2023–28 period RAB roll forward at the next reset³⁴
- subtracting any gross proceeds for asset disposals for the relevant year from capex to be added to the RAB.³⁵ We check these amounts against audited regulatory accounts data.

These annual adjustments give the closing RAB for any particular year, which then becomes the opening RAB for the following year. Through this process, the RFM rolls forward the RAB to the end of the 2018–23 period.³⁶ The PTRM used to calculate the annual building block revenue requirement for the 2023–28 period generally adopts the same RAB roll forward approach as the RFM although the adjustments to the RAB are based on forecasts, rather than actual amounts.³⁷

The opening RAB for the 2028–33 period can be determined using depreciation based either on forecast or actual capex incurred during the 2023–28 period.³⁸ To roll forward the RAB using depreciation based on forecast capex, we would use the forecast depreciation contained in the PTRM for the 2023–28 period, adjusted for actual inflation. If the approach to roll forward the RAB using depreciation based on actual capex was adopted, we would recalculate the depreciation based on actual capex incurred during the 2023–28 period.

²⁸ NER, cl. S6A.2.2A(a1). The two year lag ensures that actual capex (instead of estimated capex) is available when the review of past capex commences.

²⁹ We will update any estimated capex with actual capex at the time of the next reset.

³⁰ For example, we make adjustments for movements in provisions if the actual capex amounts reported in the regulatory accounts include capitalised provisions.

³¹ NER, cl. S6A.2.1(f)(5).

³² NER, cl. 6A.4.2(a1).

³³ The use of forecast depreciation is consistent with the depreciation approach established in the transmission determination for the 2018–23 period for ElectraNet. See AER, *Final decision, ElectraNet transmission determination 2018–23, Attachment 2 – Regulatory asset base*, April 2018, p. 10.

³⁴ Refer to section 2.4.3 for the reasons.

³⁵ NER, cl. S6A.2.1(f)(6).

³⁶ Any adjustments to the closing RAB at the end of the current regulatory control period for asset movements will be recorded under the ‘Final year assets adjustments’ section in the RFM.

³⁷ NER, cl. S6A.2.4(c).

³⁸ NER, cl. S6A.2.2B(a).

Our decision on whether to use actual or forecast depreciation must be consistent with the capex incentive objective. This objective is to ensure that increases to the RAB through capex only occur where that capex reasonably reflects the capex criteria.³⁹ In deciding between actual and forecast depreciation, we have regard to:⁴⁰

- the incentives the service provider has to undertake efficient capex
- substitution possibilities between assets with different lives and the relative benefits of each
- the extent of overspending and inefficient overspending relative to the allowed forecast
- the capex incentive guideline
- the capex factors.

2.3.1 Interrelationships

The RAB is an input into the determination of the return on capital and depreciation (return of capital) building block amounts.⁴¹ Factors that influence the RAB will therefore flow through to these building block components and the annual building block revenue requirement. Other things being equal, a higher RAB increases both the return on capital and depreciation amounts.

The RAB is determined by various factors, including:

- the opening RAB (meaning the value of existing assets at the beginning of the regulatory control period)
- net capex⁴²
- depreciation
- indexation adjustment – so the RAB is presented in nominal terms, consistent with the rate of return.

The opening RAB of the 2023–28 period depends on the value of existing assets and will depend on actual net capex, actual inflation outcomes and depreciation in the past.

The RAB when projected to the end of the regulatory control period increases due to both forecast new capex and the indexation adjustment. The size of the indexation adjustment depends on expected inflation (which also affects the nominal rate of return or WACC) and the size of the RAB at the start of each year throughout the regulatory control period.

³⁹ NER, cl. 6A.5A(a).

⁴⁰ NER, cl. S6A.2.2B(b) and (c).

⁴¹ 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. It should be noted that the return on capital is calculated based on the RAB measured on an as incurred basis while depreciation (return of capital) is calculated based on the RAB measured on an as commissioned basis.

⁴² Net capex is gross capex less disposals. The rate of return or WACC also influences the size of the capex. This is because capex is not depreciated in the year it is first incurred, but added to the RAB at the end of the year. Instead, the capex amount is escalated by half-year WACC to arrive at an end of year value. It then begins depreciating the following year.

Depreciation reduces the RAB. The depreciation amount depends on the size of the opening RAB, the forecast net capex and depreciation schedules applied to the assets. By convention, the indexation adjustment is also offset against depreciation to prevent double counting of inflation in the RAB and WACC, which are both presented in nominal terms. This reduces the regulatory depreciation building block that feeds into the annual building block revenue requirement.

We maintain the RAB in real terms by indexing for inflation.⁴³ A nominal rate of return (WACC) is multiplied by the opening RAB to produce the return on capital building block.⁴⁴ To prevent the double counting of inflation through the nominal WACC and indexed RAB,⁴⁵ the regulatory depreciation building block has an offsetting reduction for indexation of the RAB.⁴⁶ Indexation of the RAB and the offsetting adjustment made to depreciation results in a smoother revenue recovery profile over the life of an asset than if it was un-indexed. If the RAB was un-indexed, there would be no need for an offsetting adjustment to the depreciation calculation of total revenue. This alternative approach provides for overall revenues being higher early in the asset's life (as a result of more depreciation being returned to the TNSP) and lower in the future—producing a steeper downward sloping profile of total revenue.⁴⁷ The implications of an un-indexed RAB are discussed further in Attachment 4.

Figure 2.1 shows the key drivers of the changes in the RAB over the 2023–28 period as proposed by ElectraNet. Overall, the closing RAB at the end of the 2023–28 period would be 10.7% higher than the opening RAB at the start of that period based on the proposal, in nominal terms. The proposed forecast net capex increases the RAB by 20.9%, while expected inflation increases it by 12.6%. Forecast depreciation, on the other hand, reduces the RAB by 22.8%.

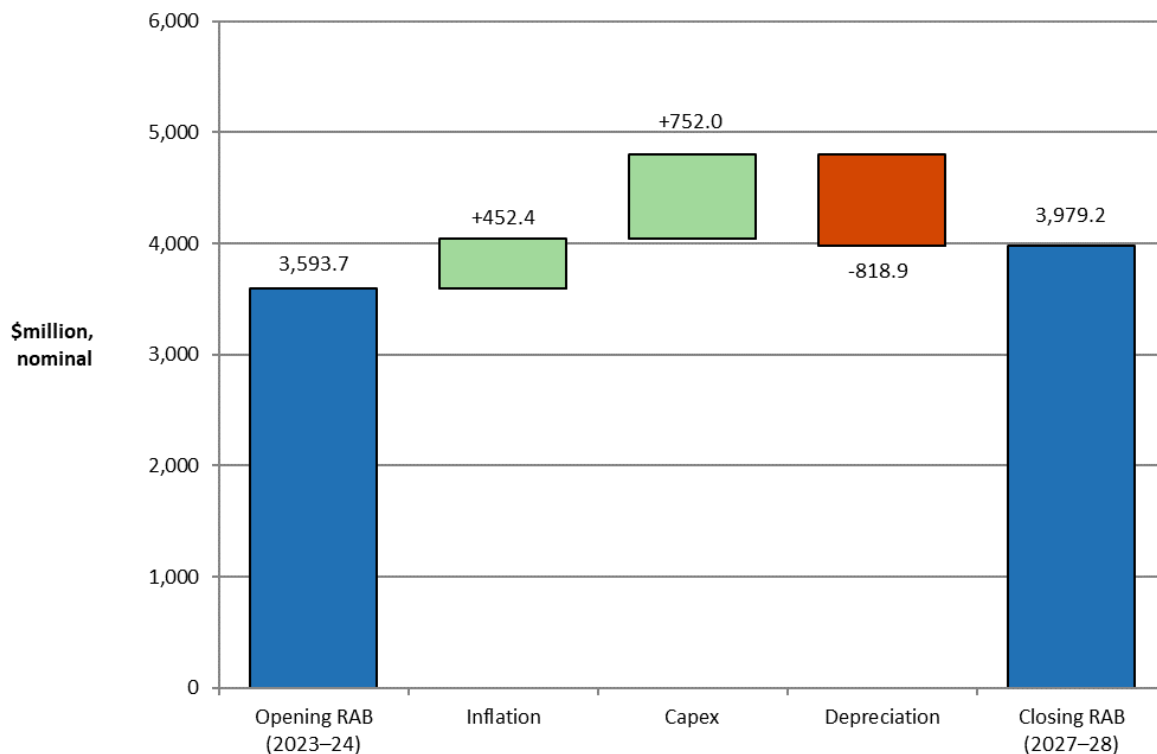
⁴³ NER, cll 6A.5.4(b)(1) and 6A.6.1(e)(3).

⁴⁴ AER, *Rate of return instrument*, cll. 1, 3(a) and 36(c), December 2018.

⁴⁵ NER, cl. 6A.5.4(b)(1)(ii).

⁴⁶ If the asset lives are extremely long, such that the RAB depreciation rate is lower than the inflation rate, then negative regulatory depreciation can emerge. The indexation adjustment is greater than the RAB depreciation in such circumstances. Please also refer to section 4.3.1 of Attachment 4 of this draft decision for further explanation of the offsetting adjustment to the depreciation.

⁴⁷ A change of approach from an indexed RAB to an un-indexed RAB would result in an initial step change increase in revenues to preserve net present value neutrality.

Figure 2.1 Key driver of changes in the RAB (\$ million, nominal)

Source: ElectraNet, *2023–28 Revenue proposal, Post-tax revenue model*, January 2022.

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

ElectraNet’s proposed forecast depreciation for the 2023–28 period is \$818.9 million (\$ nominal). We have accepted many aspects of ElectraNet’s depreciation proposal, subject to some input updates in its depreciation tracking module, as it satisfies the requirements of the National Electricity Rules (NER) in terms of assigned asset lives. This is discussed in Attachment 4. The depreciation amount largely depends on the opening RAB, which in turn depends on capex in the past.⁴⁸ Depreciation associated with forecast capex is a relatively smaller amount. The accelerated depreciation proposal is also similarly a small amount of total depreciation.

Forecast net capex is generally the key driver of an increase in RAB. For this draft decision, we are satisfied that ElectraNet’s proposed forecast capex for the 2023–28 period reasonably reflects the capex criteria. We have therefore accepted ElectraNet’s forecast capex proposal of \$752.0 million (\$ nominal).⁴⁹ Our review of ElectraNet’s forecast capex is set out in Attachment 5 of this draft decision.

⁴⁸ At the time of this draft decision, the roll forward of ElectraNet’s RAB includes estimated capex values for 2021–22 and 2022–23. We expect to update the 2021–22 estimated capex with actuals in the final decision. We may also update the 2022–23 estimated capex with a revised estimate in the final decision.

⁴⁹ This amount is net of asset disposals and inclusive of half-year WACC adjustment.

A 10% increase in the opening RAB causes revenues to increase by about 2.0%. However, the impact on revenues of the annual change in RAB depends on the source of the RAB change, as some drivers affect more than one building block cost.⁵⁰

2.4 Reasons for draft decision

We determine an opening RAB value for ElectraNet of \$3817.2 million (\$ nominal) as at 1 July 2023, an increase of \$223.5 million (6.2%) from the proposed value. We forecast a closing RAB value of \$4309.3 million by 30 June 2028. This represents an increase of \$330.1 million (8.3%) compared with ElectraNet’s proposal. The reasons for our draft decision are discussed below.

2.4.1 Opening RAB as at 1 July 2023

We determine an opening RAB value of \$3817.2 million (\$ nominal) as at 1 July 2023 for ElectraNet. This value is \$223.5 million (6.2%) higher than ElectraNet’s proposed opening RAB of \$3593.7 million as at 1 July 2023.⁵¹ This increase is mainly driven by updates to the CPI inputs for 2021–22 and 2022–23 which is discussed further below.

To determine the opening RAB for ElectraNet as at 1 July 2023, we have rolled forward the RAB over the 2018–23 period to determine a closing RAB value as at 30 June 2023. In doing so, we reviewed the key inputs of ElectraNet’s proposed RFM, such as actual inflation, rate of return, gross capex values, asset disposal values, forecast depreciation and asset lives. We found these were generally correct and reconcile with relevant data sources such as ABS data, regulatory accounts and the 2018–23 decision models.⁵² However, we consider some of ElectraNet’s proposed RFM inputs require updating with newly available data.

Therefore, we have made the following updates to ElectraNet’s proposed RFM inputs:

- included estimated asset disposals for 2021–22 and 2022–23. ElectraNet’s proposed RFM did not contain any estimated asset disposals for these years and only contained an amount related to the removal of grandfathered assets (discussed below). In its response to our information request, ElectraNet provided an estimate of asset disposals (as incurred and as commissioned) for certain asset classes for 2021–22 and 2022–23.⁵³ This update has resulted in a decrease to the closing RAB as at 30 June 2023 by \$3.8 million⁵⁴
- updated ElectraNet’s estimate for the 2021–22 inflation of 2.45% with actual CPI of 3.5% published by the ABS, which became available after ElectraNet submitted its proposal. We have also updated the estimated CPI for 2022–23 to better reflect the latest

⁵⁰ If capex causes the RAB increase – return on capital, depreciation and debt raising costs all increase too. If a reduction in depreciation causes the RAB increase, revenue could increase or decrease. In this case, the higher return on capital is offset (perhaps more than offset) by the reduction in depreciation allowance. Inflation naturally increases the RAB in nominal terms.

⁵¹ ElectraNet, *Attachment 2 – Regulatory asset base*, January 2022, p. 6.

⁵² At the time of this draft decision, the roll forward of ElectraNet’s RAB includes estimated capex values for 2021–22 and 2022–23. We expect to update the 2021–22 estimated capex with actuals in the final decision. We may also update the 2022–23 estimated capex with a revised estimate in the final decision.

⁵³ ElectraNet, *Response to information request AER IR013*, 18 May 2022.

⁵⁴ We will update the 2021–22 disposal amount with actuals for the final decision. The 2022–23 amount will be trued-up for actual asset disposals at the next reset.

economic conditions. ElectraNet’s proposal had used the forecast inflation calculated in the PTRM of 2.45% as the estimated CPI input for 2022–23. We have updated this value to 7.8% based on the RBA’s *Statement on Monetary Policy*.⁵⁵ These CPI updates have therefore resulted in an increase to the closing RAB value as at 30 June 2023 by \$218.2 million⁵⁶

- updated the nominal WACC input for 2022–23 following the most recent return on debt update for that year in the 2018–23 PTRM. This update has resulted in a slight decrease of \$0.04 million to the closing RAB value as at 30 June 2023
- updated as incurred and as commissioned ‘Equity raising costs’ capex in 2018–19 and the forecast depreciation input for the years 2019–20 to 2022–23 due to the 2022–23 return on debt update to ElectraNet’s PTRM for the 2018–23 period.⁵⁷

We have also made a number of amendments relating to the inputs in the final year asset adjustments section of the RFM. Our assessment of these inputs and reasons for the amendments are discussed below.

Removal of grandfathered assets

Over time, the use of ElectraNet’s network can change and the classification of its assets may also change accordingly. In these circumstances, we amend the RAB to reflect the changing circumstances of the assets.

ElectraNet proposed to remove \$13.7 million (\$ nominal) from its closing RAB as at 1 July 2023.⁵⁸ ElectraNet stated that at the start of the 2023–28 period, six of its customer connection substations were altered to facilitate a change of service, and will no longer provide a prescribed connection service.⁵⁹ These assets were initially included in the RAB under a transitional rule for grandfathered assets, however, at the commencement of the 2023–28 period, the connection services previously provided at the identified substations will be taken to be negotiated transmission services and the value of the assets which previously provided those connection services will be removed from the RAB as at 30 June 2023.⁶⁰ ElectraNet removed these assets by recording \$13.7 million of asset disposals in its proposed RFM.

We agree with ElectraNet that the removal of these assets from the RAB as a result of ceasing to provide prescribed connection services is consistent with the requirement of the NER.⁶¹ However, we do not consider using the ‘Asset disposals’ section to be the

⁵⁵ RBA, *Statement on Monetary Policy, Appendix: Forecasts*, August 2022.

⁵⁶ All else being equal, a higher CPI will result in a higher inflation indexation for the RAB and therefore increase the value of the RAB. In our final decision, we will update the estimate for 2022–23 expected inflation with actual CPI.

⁵⁷ This is because if the external equity raising threshold is achieved, any resulting benchmark equity raising cost allowance will be recalculated to reflect any new financing cost requirements as a result of the return on debt update.

⁵⁸ The amount removed from our draft decision RFM is \$14.5 million (\$ nominal) as at 30 June 2023. This is \$0.7 million higher than ElectraNet’s proposed amount due to updates to indexation.

⁵⁹ NER, cl. 11.6.11.

⁶⁰ ElectraNet, *Attachment 2 – Regulatory asset base*, January 2022, pp. 6–7.

⁶¹ NER, cl. 11.6.11(d).

appropriate approach to remove assets from the RAB. Instead, our draft decision amends ElectraNet’s modelling approach to remove the residual value of these assets in the ‘Forecast final year asset adjustments’ section of the RFM.⁶² In its response to our information request, ElectraNet agreed with our approach for removing these assets.⁶³

The final year asset adjustment also requires a corresponding remaining asset life for the regulatory depreciation calculation—our draft decision assigns a remaining life of 36.5 years for the ‘Substation primary plant’ asset class and one year for the ‘Substation secondary systems – electronic’ asset class as at 1 July 2023. These remaining lives were provided by ElectraNet in its response to our information request.⁶⁴

Removal of the ‘Refurbishment’ asset class residual value

ElectraNet’s proposed RFM included a closing as incurred RAB value as at 30 June 2023 for the ‘Refurbishment’ asset class of –\$7.0 million (\$ nominal).⁶⁵ However, this asset class has been fully depreciated with a zero as commissioned closing RAB value as at 30 June 2023 and no new capex is being proposed over the 2023–28 period. This negative value is due to the partially as incurred approach adopted in our models.⁶⁶

Therefore, our draft decision approach is to remove the negative residual value from the as incurred RAB in the RFM as a final year asset adjustment. This is consistent with our standard approach for removing an asset that has reached the end of its useful life and the asset class contains no forecast capex for the future.

In response to an information request, ElectraNet stated it has no concerns with our draft decision approach to remove the residual value for the ‘Refurbishment’ asset class from the closing as incurred RAB as at 30 June 2023.⁶⁷

Change in capitalisation policy

ElectraNet proposed to capitalise its lease costs to reflect a change in accounting standards (AASB 16). These costs were previously treated as opex. ElectraNet added the forecast annual spend for leases (including existing and future leases to be entered in the 2023–28 period) to the RAB as annual capex amounts and proposed a standard asset life of 1 year so that these costs are recovered annually.

We have assessed ElectraNet’s approach to capitalise lease costs and do not consider it to be consistent with AASB 16, which requires the present value of remaining lease payments to be capitalised. Instead, our draft decision approach:

⁶² AER, *Appendix E – Transmission roll forward model – Electricity – version 4.1*, May 2022.

⁶³ ElectraNet, *Response to information request AER IR008*, 2 May 2022.

⁶⁴ ElectraNet, *Response to information request AER IR008*, 17 August 2022.

⁶⁵ The amount removed from our draft decision RFM for the ‘Refurbishment’ asset class is \$7.4 million (\$ nominal) as at 30 June 2023. This is \$0.4 million higher than ElectraNet’s proposed amount due to updates to indexation.

⁶⁶ When rolling forward the RAB, the straight-line depreciation from the RAB is calculated on an as commissioned basis, which is then deducted from the as incurred RAB. This timing difference results in a discrepancy in the as incurred and as commissioned RABs, which is only visible when an asset class has no ongoing capex allocated and has been fully depreciated.

⁶⁷ ElectraNet, *Response to information request AER IR008*, 2 May 2022.

- for existing leases, is to capitalise the present value of future lease costs into the RAB as at 30 June 2023, and assign a remaining life reflecting the remaining lease term for ElectraNet to recover these costs.
- for future leases to be entered in the 2023–28 period, the present value of the lease costs will be added as forecast capex in the year when those leases are incurred. These leases will be assigned a standard asset life reflecting a weighted average of their relevant terms.

This is consistent with the approach we have taken in our decisions for other network service providers to implement such a change.⁶⁸

In response to an information request, ElectraNet agreed with our approach to capitalise the present value of future lease costs.⁶⁹ In doing so, ElectraNet provided a value of \$2.0 million to be added to the closing RAB, which reflects the present value of existing leases as at 30 June 2023, and a forecast capex amount of \$2.9 million (\$2022–23) reflecting the present value of future lease payments to be added to the RAB for the 2023–28 period. ElectraNet also provided the remaining terms of the relevant leases for depreciation purposes (discussed in more in detail in Attachment 4).

ElectraNet also proposed to move certain intangible assets from capex to opex due to changes in accounting treatment for these types of assets. Similar to the lease costs, ElectraNet proposed to make this change from the start of the 2023–28 period.⁷⁰ We have assessed and agree with ElectraNet’s approach. Therefore, the capex incurred during the 2018–23 period for these assets will be included in the opening RAB as at 1 July 2023.

Ex post review of 2016–21 capex

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.⁷¹ In the 2018–23 transmission determination, we noted that the 2016–17 and 2017–18 capex would form part of the review period for whether past capex should be excluded for inefficiency reasons in this transmission determination.⁷² The capex for 2018–21 also forms part of the review period. Consistent with the requirements of the NER, we have excluded the last two years of the 2018–23 period from the review of past capex for this transmission determination.⁷³ This approach ensures that actual capex (instead of estimated capex) is available when the review of past capex commences.

ElectraNet’s aggregate actual capex incurred from 2016–17 and 2020–21 is above the forecast allowance set at the previous relevant transmission determinations. Therefore, the

⁶⁸ AER, *Draft decision: Essential Energy 2019–24 – Attachment 4 – Regulatory depreciation*, November 2018 pp. 4–12; AER, *Draft decision: Power and Water Corporation 2019–24 – Attachment 4 – Regulatory depreciation*, September 2018, p. 10.

⁶⁹ ElectraNet, *Response to information request AER IR 010*, 16 May 2022, p. 4.

⁷⁰ ElectraNet, *Attachment 6 – Operating expenditure*, January 2022, p. 7. These assets are related to insurance, asset manager support and maintenance support.

⁷¹ NER, cll. 6A.14.2(b) and 6A.5A(a).

⁷² AER, *Final decision, ElectraNet transmission determination 2018–23, Attachment 2 – Regulatory asset base*, April 2018, p. 7.

⁷³ NER, cl. S6A.2.2A(a1).

overspending requirement for an efficiency review of past capex is satisfied.⁷⁴ However, for the reasons discussed in Attachment 5, we consider the capex incurred in those years is consistent with the capex criteria and can therefore be included in the RAB.⁷⁵

Further, for the purposes of this draft decision, we have included estimated capex for 2021–22 and 2022–23 in the RAB roll forward to 1 July 2023. At the next reset, the 2021–22 and 2022–23 capex will form part of the review period for assessing whether past capex should be excluded for inefficiency reasons.⁷⁶ 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).⁷⁷ 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 capital expenditure criteria.⁷⁸

2.4.2 Forecast closing RAB at 30 June 2028

We forecast a closing RAB value of \$4309.3 million by 30 June 2028 for ElectraNet, which represents an increase of \$330.1 million (8.3%) to ElectraNet’s proposal. The increase reflects our draft decision on the inputs for determining the forecast RAB in the PTRM. Our draft decision used version 5.1 of the PTRM to forecast the closing RAB by 30 June 2028.⁷⁹ This new version of the PTRM was published after ElectraNet submitted its revenue proposal and corrects for a calculation error.⁸⁰

The change in the size of the RAB over the 2023–28 period depends on our assessment of its various components including forecast capex (Attachment 5), expected inflation (Attachment 3) and forecast depreciation (Attachment 4). Inflation and capex increases the RAB, while depreciation and disposals reduce it.

To determine the forecast RAB value for ElectraNet, we amended the following PTRM inputs:

- we increased ElectraNet’s proposed opening RAB as at 1 July 2023 by \$223.5 million (\$ nominal) or 6.2% (section 2.4.1)
- we increased ElectraNet’s proposed forecast capex for the 2023–28 period by \$14.4 million (\$ nominal) or 1.9% (Attachment 5)⁸¹

⁷⁴ NER, cl. S6A.2.2A(c).

⁷⁵ Ibid.

⁷⁶ Here, ‘inefficiency’ of past capex refers to three specific assessments (labelled the overspending, margin and capitalisation requirements) detailed in NER, cl. S6A.2.2A(b). The details of our ex post assessment approach are set out in AER, *Capital expenditure incentive guideline*, November 2013, pp. 13–20.

⁷⁷ AER, *Final decision, ElectraNet transmission determination 2018–23, Attachment 2 – Regulatory asset base*, April 2018, p. 10.

⁷⁸ NER, cll. 6A.5A(a), 6A.6.7(c) and 6A.14.2(b).

⁷⁹ AER, *Electricity transmission network service providers: Post-tax revenue model (version 5.1)*, May 2022.

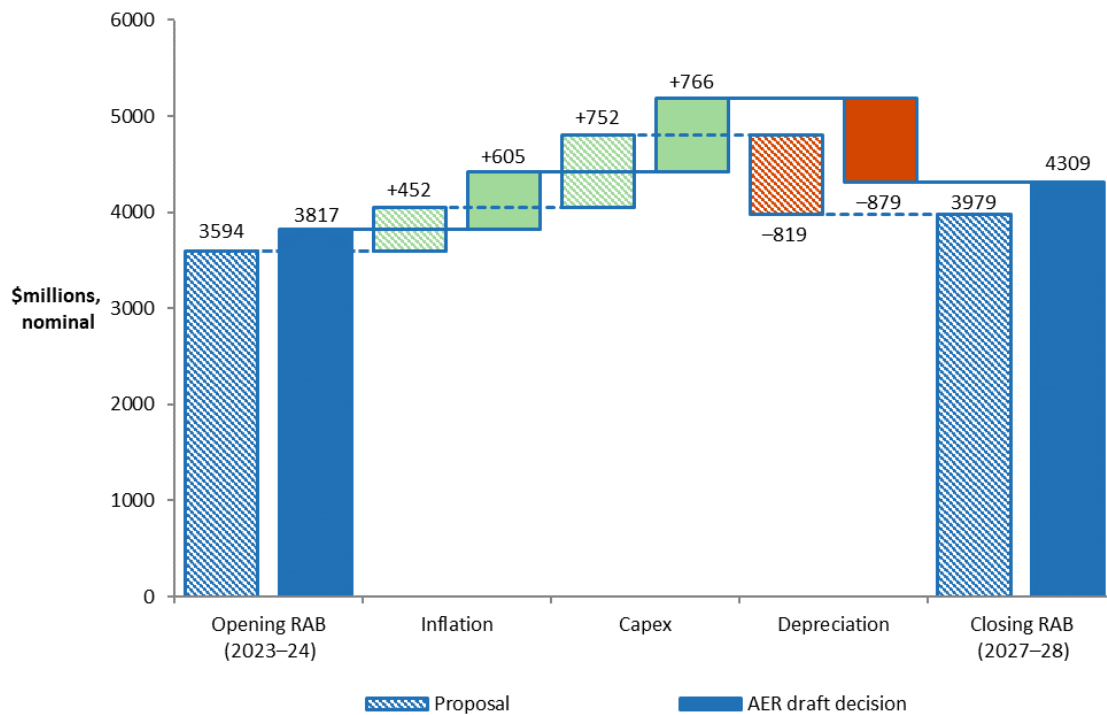
⁸⁰ The error affects the calculation of expected inflation for a regulatory control period longer than 5 years. As a result, this error does not affect ElectraNet over the forecast 2023–28 period.

⁸¹ This figure reflects as incurred capex net of asset disposals, and inclusive of half-year WACC adjustment. We have accepted ElectraNet’s forecast capex proposal. This difference reflects updates to expected inflation and the nominal vanilla WACC in our draft decision.

- we updated ElectraNet’s proposed expected inflation rate from 2.40% per annum to 3.00% per annum over the 2023–28 period (Attachment 3). Compared to the proposal, our draft decision results in an increase to the indexation of the RAB component for the 2023–28 period by \$152.5 million or 33.7% (\$ nominal)⁸²
- we increased ElectraNet’s proposed forecast straight-line depreciation for the 2023–28 period by \$60.3 million (\$ nominal) or 7.4% (Attachment 4).

Figure 2.2 shows the key drivers of the change in ElectraNet’s RAB over the 2023–28 period for this draft decision. Overall, our draft decision closing RAB at the end of the 2023–28 period is forecast to be 12.9% higher than the opening RAB at the start of that period, in nominal terms. The approved forecast net capex increases the RAB by 20.1%, while expected inflation increases it by 15.8%. Forecast depreciation, on the other hand, reduces the RAB by 23%.

Figure 2.2 Key drivers of changes in the RAB – ElectraNet’s proposal compared with AER’s draft 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.

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

We determine that the depreciation approach to be applied to ElectraNet’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 asset class level approved for the 2023–28 period.

⁸² The increase in the indexation of the RAB is largely due to an increase in the expected inflation rate and higher opening RAB in our draft decision.

We consider this approach will provide sufficient incentives for ElectraNet to achieve capex efficiency gains over the 2023–28 period.⁸³

ElectraNet’s proposal did not specify what depreciation approach to use in the roll forward of the RAB for the commencement of its 2028–33 period. However, we consider that the forecast depreciation approach should be used to establish the opening RAB as at 1 July 2028. We note that this approach is consistent with our *Framework and Approach* paper.⁸⁴

We have used forecast depreciation for this draft decision when rolling forward the opening RAB at the commencement of the 2023–28 period (section 2.4.1). The use of forecast depreciation to establish the opening RAB for the commencement of the 2028–33 period at the next reset therefore maintains the current approach.

As discussed in Attachment 9, ElectraNet is currently subject to the CESS for the 2018–23 period. We will continue to apply the CESS to ElectraNet over the 2023–28 period. We consider that the CESS will provide sufficient incentives for ElectraNet 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.⁸⁵

⁸³ NER, cll 6A.14.1(5E) and S6A.2.2B.

⁸⁴ AER, *Final, ElectraNet 2023–28 – Framework and Approach*, July 2021, p. 26.

⁸⁵ 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. 13-19 and 20-21. The guideline also sets out how all our capex incentive measures are consistent with the capex incentive objective.

Glossary

Term	Definition
ABS	Australian Bureau of Statistics
AEMO	Australian Energy Market Operator
AER	Australian Energy Regulator
Capex	Capital expenditure
CESS	Capital expenditure sharing scheme
CPI	Consumer price index
NEO	National Electricity Objective
NER	National Electricity Rules
Opex	Operating expenditure
PTRM	Post-tax revenue model
RAB	Regulatory asset base
RFM	Roll forward model
TNSP	Transmission network service provider
WACC	Weighted average cost of capital