Draft Decision

Ausgrid Electricity Distribution Determination 2024 to 2029

(1 July 2024 to 30 June 2029)

Attachment 4
Regulatory depreciation

September 2024

AUSTRALIAN ENERGY REGULATOR

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4 Regulatory depreciation

Regulatory 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 Ausgrid, we make determinations on the indexation of the regulatory asset base (RAB) and depreciation building blocks for Ausgrid's 2024–29 regulatory control period for its distribution and transmission (dual function assets) networks.[1] Ausgrid's dual function assets are high voltage assets which support the broader NSW/ACT transmission network owned and operated by Transgrid. The AER has decided to continue applying transmission pricing to these assets.[2]

The regulatory depreciation amount is the net total of the straight-line depreciation less the indexation of the RAB.

This attachment sets out our draft decision on Ausgrid's regulatory depreciation amounts. It also presents our draft decision on the proposed depreciation schedules, including an assessment of the proposed standard and remaining asset lives used for calculating straight-line depreciation.

4.1 Draft decision

We determine regulatory depreciation amounts of $579.2 million and $65.1 million ($ nominal) for Ausgrid's distribution and transmission networks respectively for the 2024–29 period. Ausgrid proposed regulatory depreciation amounts of $558.6 million and $61.1 million ($ nominal) for its distribution and transmission networks respectively.[3] Our draft decision represents an increase of $20.6 million (3.7%) and $4.0 million (6.6%) on the proposed amounts.

The increases are primarily the result of our draft decision on the expected inflation rate for the 2024–29 period (Attachment 3), which affects the projected RAB over this period. Indexation of the RAB is $112.3 million lower (for distribution) and $14.3 million lower (for transmission) than the proposal, largely due to applying a lower expected inflation rate of 2.80% per annum in this draft decision compared to Ausgrid's proposal of 2.87% per annum. However, straight-line depreciation is $91.7 million lower (for distribution) and $10.3 million lower (for transmission) than the proposal mainly due to lower opening RABs as at 1 July 2024 (Attachment 2) and reductions to forecast capex over the 2024–29 period (Attachment 5). The lower RAB indexation has more than offset the decrease in straight-line depreciation (since indexation is deducted from straight-line depreciation).

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1 Clause 6.12.1 of the National Electricity Rules (NER) sets out the 'constituent decisions' we must make as part of a distribution determination. We must decide whether or not to approve the depreciation schedules submitted by a Distribution Network Service Provider (cl. 6.12.1(8)). This is one of the building blocks we must use to determine the annual revenue requirement: cl. 6.4.3 of the NER.

2 AER, *Framework and approach: Ausgrid, Endeavour Energy and Essential Energy (New South Wales), Regulatory control period commencing 1 July 2024*, July 2022, p. 54.

3 Ausgrid, *Attachment 4.1.b - PTRM for distribution*, January 2023; Ausgrid, *Att. 4.1.d - PTRM for transmission*, January 2023.

For our draft decision on Ausgrid's regulatory depreciation:

- We accept Ausgrid's proposed straight-line depreciation method used to calculate the regulatory depreciation amount.
- We accept Ausgrid's proposal to continue using the weighted average remaining life (WARL) approach to calculate the remaining asset lives as at 1 July 2024 for implementing straight-line depreciation of its existing assets. In accepting the weighted average method, we have updated Ausgrid's remaining asset lives to reflect our adjustments to the proposed roll forward models (RFMs) (section 4.4.3).
- We accept Ausgrid's proposed existing asset classes and standard asset lives. We also accept the proposed four new asset classes for its distribution network and three new asset classes for its transmission network, including their standard asset lives (section 4.4.2).[4]
- We accept Ausgrid's proposal to reallocate the negative residual RAB value from its existing 'Land (non-system)' asset class to a dedicated asset class for reverse depreciation purposes (by returning the negative amount to customers in the 2024–29 period) as part of Ausgrid's proposed 'Property sales strategy to help with affordability' program. However, our draft decision updated the proposed reallocation amounts to $264.2 million (for distribution) and $37.0 million (for transmission) ($ nominal). This is to reflect our updated draft decision distribution and transmission closing RABs as at 30 June 2024 (section 4.4.1).
- We introduce a new asset class for 'Composite poles' and assign a standard asset life after our review of Ausgrid's proposed capex for poles (section 4.4.2).

We made determinations on other components of Ausgrid's proposal which affect the forecast regulatory depreciation—for example, the opening RAB at 1 July 2024 (Attachment 2), expected inflation (Attachment 3), and forecast capital expenditure (capex) (Attachment 5) including its effect on the projected RAB over the 2024–29 period.[5]

Table 4.1 and Table 4.2 set out our draft decision on the annual regulatory depreciation amounts for Ausgrid's 2024–29 period for its distribution and transmission networks respectively.

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4 These are labelled 'Distribution Leases (network)', 'Distribution Leases (non-network)', 'Enterprise resource platform' and 'Land (non-system) depreciation' for the distribution network, and 'Transmission Leases (non-network)', 'Enterprise resource platform' and 'Land (non-system) depreciation' for the transmission network.

5 Capex enters the RAB net of forecast disposals and capital contributions. It includes equity raising costs (where relevant) and the half-year weighted average cost of capital (WACC) to account for the timing assumptions in the PTRM. Our draft decision on the RAB (Attachment 2) also reflects our updates to the WACC for the 2024–29 period.

Table 4.1 AER's draft decision on Ausgrid's forecast depreciation for the 2024–29 period – distribution ($million, nominal)

	2024–25	2025–26	2026–27	2027–28	2028–29	Total
Straight-line depreciation	519.9	561.9	605.1	628.7	625.8	2,941.4
Less: inflation indexation on opening RAB	445.9	460.7	473.4	485.6	496.6	2,362.2
Regulatory depreciation	**74.0**	**101.2**	**131.6**	**143.1**	**129.2**	**579.2**

Source: AER analysis.

Table 4.2 AER's draft decision on Ausgrid's forecast depreciation for the 2024–29 period – transmission ($million, nominal)

	2024–25	2025–26	2026–27	2027–28	2028–29	Total
Straight-line depreciation	76.8	82.0	87.0	89.4	87.9	423.2
Less: inflation indexation on opening RAB	69.6	71.0	71.7	72.4	73.3	358.0
Regulatory depreciation	**7.2**	**11.0**	**15.3**	**17.0**	**14.6**	**65.1**

Source: AER analysis.

4.2 Ausgrid's proposal

For the 2024–29 period, Ausgrid proposed total forecast regulatory depreciation amounts of $558.6 million and $61.1 million ($ nominal) for its distribution and transmission networks respectively. To calculate the depreciation amount, Ausgrid proposed to use:[6]

- the straight-line depreciation method employed in the AER's post-tax revenue model (PTRM)
- the closing RAB values at 30 June 2024 derived from the AER's RFM
- the forecast capex for the 2024–29 period proposed by Ausgrid
- an expected inflation rate of 2.87% per annum for the 2024–29 period
- the WARL approach to determine remaining asset lives as at 1 July 2024 derived from the RFM to calculate the forecast depreciation (over the 2024–29 period) of the opening RAB at 1 July 2024
- the same asset classes and standard asset lives for depreciating its forecast capex for the 2024–29 period, which are consistent with those approved in the 2019–24 distribution determination. Ausgrid also proposed four new distribution and three new transmission asset classes of 'Leases (Network)' for distribution; and 'Leases (Non-

[6] Ausgrid, *Attachment 4.1.b - PTRM for distribution*, January 2023; Ausgrid, *Attachment 4.1.a - RFM for distribution*, January 2023. Ausgrid, *Attachment 4.1.d - PTRM for transmission*, January 2023; Ausgrid; Ausgrid, *Attachment 4.1.c - RFM for transmission*, January 2023.

network)', 'Enterprise resource platform' and 'Land (non-system) depreciation' for distribution and transmission over the 2024–29 period

- the new 'Land (non-system) depreciation' asset class to reallocate the negative residual closing RAB values as at 30 June 2024 from its existing 'Land (non-system)' asset class. This treatment provides for reverse depreciation by returning the negative amounts to customers in the 2024–29 period as part of Ausgrid's proposed 'Property sales strategy to help with affordability' program.[7]

Table 4.3 and Table 4.4 set out Ausgrid's proposed regulatory depreciation amounts for the 2024–29 period for its distribution and transmission networks respectively.

Table 4.3 Ausgrid's proposed regulatory depreciation for the 2024–29 period – distribution ($million, nominal)

	2024–25	2025–26	2026–27	2027–28	2028–29	Total
Straight-line depreciation	527.5	575.0	622.4	652.7	655.6	3,033.1
Less: indexation on opening RAB	461.2	479.1	495.7	511.7	526.7	2,474.5
Regulatory depreciation	**66.3**	**95.9**	**126.6**	**140.9**	**128.8**	**558.6**

Source: Ausgrid, *Attachment 4.1.b - PTRM for distribution*, January 2023.

Table 4.4 Ausgrid's proposed regulatory depreciation for the 2024–29 period – transmission ($million, nominal)

	2024–25	2025–26	2026–27	2027–28	2028–29	Total
Straight-line depreciation	77.6	83.4	89.0	92.1	91.3	433.5
Less: indexation on opening RAB	71.9	73.5	74.6	75.5	76.8	372.3
Regulatory depreciation	**5.7**	**9.9**	**14.4**	**16.6**	**14.5**	**61.1**

Source: Ausgrid, *Attachment 4.1.d - PTRM for transmission*, January 2023.

4.3 Assessment approach

We must determine the regulatory depreciation amount as part of determining a distributor's annual revenue requirement.[8] The calculation of depreciation in each year is governed by the value of assets included in the RAB at the beginning of the regulatory year, and by the depreciation schedules.[9]

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7 The same treatment was applied to the negative residual closing TAB values as at 30 June 2024. This is a RAB and TAB reallocation and does not affect the total value of the opening RAB or TAB as at 1 July 2024.

8 NER, cll. 6.4.3(a)(3) and (b)(3).

9 NER, cl. 6.5.5(a).

4.3.1 Approach to determining depreciation

Our standard approach to calculating depreciation is to employ the straight-line method set out in the PTRM. Regulatory practice has been to assign a standard asset life to each category of assets that represents the economic or technical life of the asset or asset class.[10] We must consider whether the proposed depreciation schedules conform to the following key requirements:

- the schedules must depreciate using a profile that reflects the nature of the assets or category of assets over the economic life of that asset or category of assets[11]
- the sum of the real value of the depreciation that is attributable to any asset or category of assets must be equivalent to the value at which that asset or category of assets was first included in the RAB for the relevant distribution system.[12]

To the extent that a distributor's regulatory proposal does not comply with the above requirements, we must determine the depreciation schedules for calculating the depreciation for each regulatory year.[13]

The regulatory depreciation amount is an output of the PTRM. We therefore assessed Ausgrid's proposed regulatory depreciation amount by analysing the proposed inputs to the PTRM for calculating that amount. The key inputs include:

- the opening RAB at 1 July 2024
- the forecast net capex in the 2024–29 period[14]
- the expected inflation rate for the above period
- the standard asset life for each asset class—used for calculating the depreciation of new assets associated with forecast net capex in the above period
- the remaining asset life for each asset class—used for calculating the depreciation of existing assets as at 1 July 2024 under the weighted average approach.

Our draft decision on Ausgrid's regulatory depreciation amount reflects our determinations on the opening RAB at 1 July 2024, expected inflation rate, and forecast capex (the first three

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10 This is the standard practice for the AER, as well as other jurisdictional regulators. See for example, IPART, *Cost building block model template*, 20 June 2014, Table 1; ERAWA, *Final Decision on Proposed Revisions to the Access Arrangement for the Western Power Network*, September 2012, Appendix 2: Target Revenue Calculation (Revenue Model).

AER, *Final decision: Electricity distribution network service providers – Post-tax revenue model handbook*, April 2021, p. 15.

AER, *Draft decision: AusNet Services transmission determination 2017-18 to 2021-22, Attachment 5 – Regulatory depreciation*, July 2016, p. 37.

11 NER, cl. 6.5.5(b)(1).

12 NER, cl. 6.5.5(b)(2).

13 NER, cl. 6.5.5(a)(2)(ii).

14 Capex enters the RAB net of forecast disposals and capital contributions. It includes equity raising costs (where relevant) and is adjusted for the half-year WACC to account for the timing assumptions in the PTRM. Our draft decision on the RAB (Attachment 2) also reflects our updates to the WACC for the 2024–29 period.

building block components in the above list).[15] Our determinations on these components of Ausgrid's proposal are discussed in Attachments 2, 3 and 5 respectively.

In this attachment, we assess Ausgrid's proposed standard asset lives against:

- the approved standard asset lives in the distribution determination for the 2019–24 period
- the standard asset lives of comparable asset classes approved in our recent distribution determinations for other service providers
- the appropriate economic lives of the assets.

Our regulatory models (RFM and PTRM) provide for two approaches for calculating the straight-line depreciation of existing assets:

- the 'weighted average remaining lives' approach: This approach calculates the remaining asset life for an asset class by weighting together its remaining asset life at the beginning of the regulatory control period with the new capex added to the asset class during that period. The residual asset values are used as weights to calculate the remaining asset life at the end of that period. The WARL for the asset classes are calculated in our RFM and are inputs to the PTRM. We consider this approach meets the requirements for determining depreciation under the National Electricity Rules (NER).
- the 'year-by-year tracking' approach: Under this approach, the capex (in addition to grouping assets by type via asset classes) for each year of the regulatory control period is depreciated separately and tracked on a year-by-year basis over the assigned standard life for the asset class. This approach does not require the assessment of the remaining asset life at each five-yearly distribution determination. We consider this approach also meets the requirements for determining depreciation under the NER. Our depreciation tracking module in the RFM conducts the detailed calculations required under this approach. The output of this module is then recorded in the PTRM.

Ausgrid has proposed to continue applying the WARL approach to calculate the straight-line depreciation of its opening RAB as at 1 July 2024. Our assessment on Ausgrid's proposed remaining asset lives is discussed in section 4.4.3.

4.3.2 Interrelationships

The regulatory depreciation amount is a building block component of the annual revenue requirement.[16] Higher (or quicker) depreciation leads to higher revenues over the regulatory control period. It also causes the RAB to reduce more quickly (excluding the impact of further

[15] Our final decision will update the opening RAB as at 1 July 2024 for revised estimates of actual capex and inflation.

[16] The PTRM distinguishes between straight-line depreciation and regulatory depreciation, where regulatory depreciation is the straight-line depreciation less the indexation adjustment.

capex). This reduces the return on capital amount, although this impact is usually smaller than the increased depreciation amount in the short to medium term.[17]

Ultimately, however, a distributor can only recover the capex that it incurs on assets once. The depreciation amount reflects how quickly the RAB is being recovered, and it is based on the asset lives used in the depreciation calculation. It also depends on the level of the opening RAB and the forecast capex. Any increase in these factors also increases the depreciation amount.

The RAB has to be maintained in real terms, meaning the RAB must be indexed for expected inflation.[18] The return on capital building block has to be calculated using a nominal rate of return applied to the opening RAB.[19] As noted in attachment 1, the total annual revenue requirement is calculated by adding up the return on capital, depreciation, operating expenditure (opex), tax and revenue adjustments building blocks. Because inflation on the RAB is accounted for in both the return on capital—based on a nominal rate—and the depreciation calculations—based on an indexed RAB—an adjustment must be made to the revenue requirement to prevent compensating twice for inflation.

To avoid this double compensation, we make an adjustment by subtracting the annual indexation gain on the RAB from the calculation of total revenue. Our standard approach is to subtract the indexation of the opening RAB—the opening RAB multiplied by the expected inflation for the year—from the RAB depreciation. The net result of this calculation is referred to as regulatory depreciation.[20] Regulatory depreciation is the amount used in the building block calculation of total revenue to ensure that the revenue equation is consistent with the use of a RAB, which is indexed for inflation annually. Figure 4.1 shows where the inflation components are included in the building block costs.

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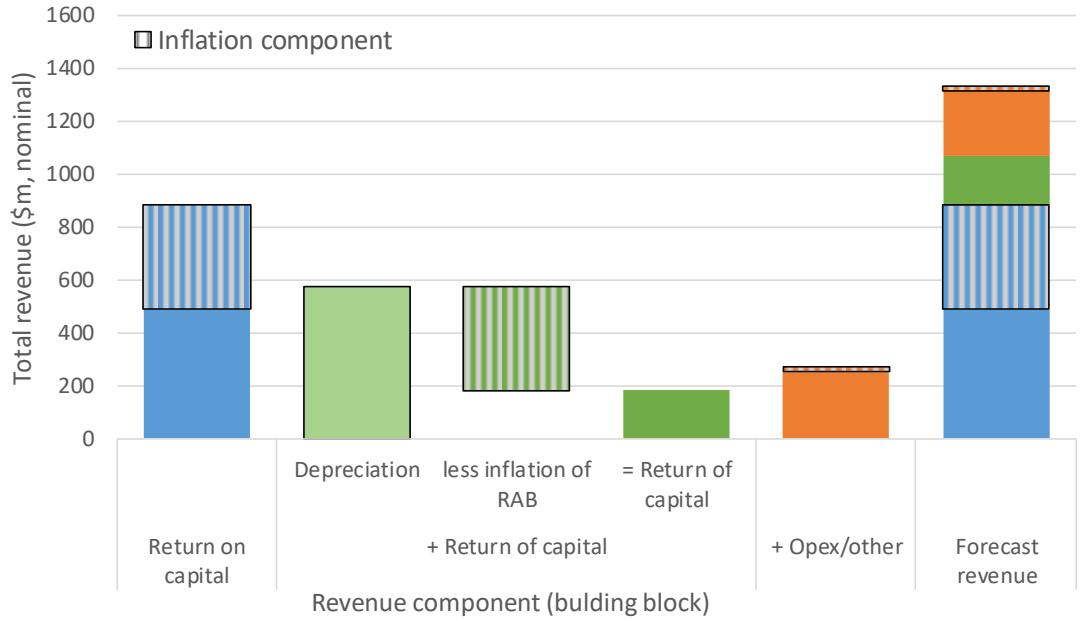
17 This is generally the case because the reduction in the RAB amount feeds into the higher depreciation building block, whereas the reduced return on capital building block is proportionate to the lower RAB multiplied by the WACC.

18 NER, cl. 6.2.3(c)(4).

19 AER, *Rate of return instrument*, cll. 1, 3, 36(c), February 2023.

20 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.

Figure 4.1 Inflation compoenents in revenue building block – example



Source: AER analysis.

This approach produces the same total revenue requirement and RAB as if a real rate of return had been used in combination with an indexed RAB. Under an alternative approach where a nominal rate of return was used in combination with an un-indexed (historical cost) RAB, no adjustment to the depreciation calculation of total revenue would be required. This alternative approach produces a different time path of total revenue compared to our standard approach. In particular, overall revenues would be higher early in the asset's life (as a result of more depreciation being returned to the distributor) and lower in the future—producing a steeper downward sloping profile of total revenue.[21] Under both approaches, the total revenues being recovered are in present value neutral terms—that is, returning the initial cost of the RAB.

Figure 4.2 shows the recovery of revenue under both approaches using a simplified example.[22] Indexation of the RAB and the offsetting adjustment made to depreciation results in smoother revenue recovery profile over the life of an asset than if the RAB was un-indexed. The indexation of the RAB also reduces price shocks when the asset is replaced at the end of its life.[23]

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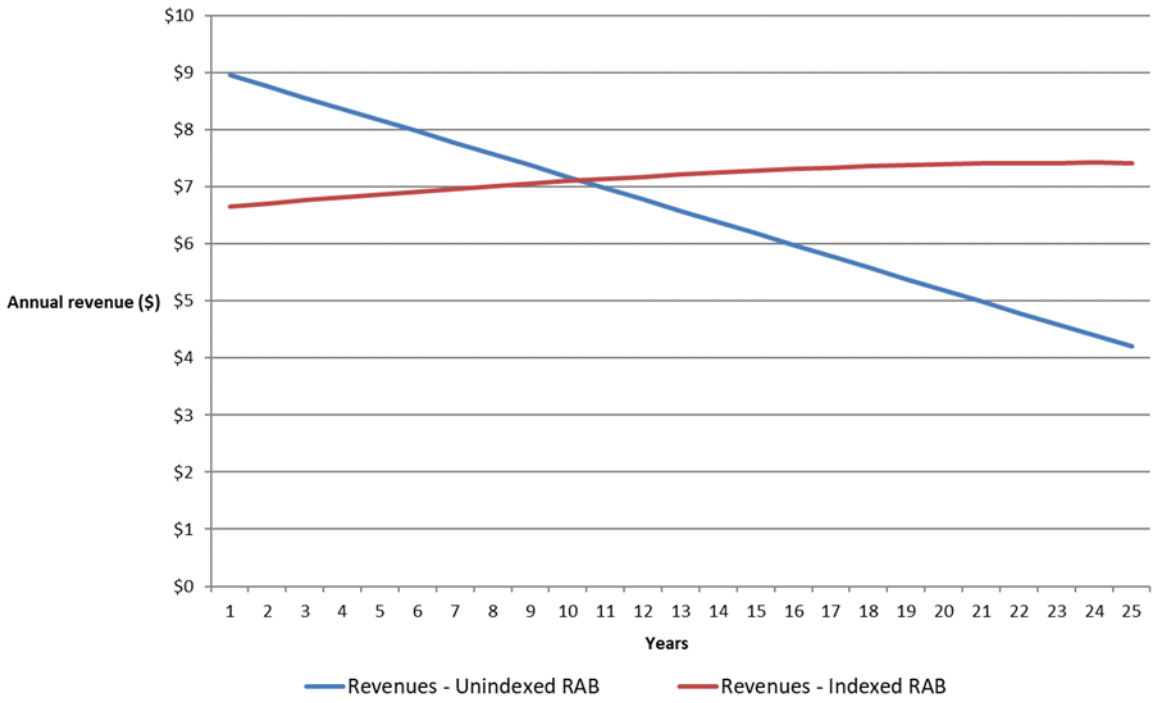
21 A change of approach from an indexed RAB to an un-indexed RAB would result in an initial step change increase in revenues to preserve net present value (NPV) neutrality.

22 The example is based on the initial cost of an asset of $100, a standard economic life of 25 years, a real WACC of 2.5%, expected inflation of 2.4% and nominal WACC of 4.96%. Other building block components such as opex, tax and capex are ignored for simplicity as they would affect both approaches equally.

23 In year 26 the revenues in the example for the un-indexed approach would jump from about $4 to $9, assuming the asset is replaced by an asset of roughly similar replacement cost as the initial asset. In contrast, in the same circumstances, the indexed approach would see revenues stay at roughly $7.

Figure 4.2 Revenue path example – indexed vs un-indexed RAB ($ nominal)



Source: AER analysis.

Figure 2.1 and 2.2 (in Attachment 2) show the relative size of the inflation and straight-line depreciation, and their impact on the RAB based on Ausgrid's proposal. A 10% increase in the straight-line depreciation causes unsmoothed revenues ($ nominal) to increase by about 3.8% and 4.8% for Ausgrid's distribution and transmission networks respectively.[24]

4.4 Reasons for draft decision

We accept Ausgrid's proposed straight-line depreciation method for calculating the regulatory depreciation amount as set out in the PTRM. However, we increased Ausgrid's proposed forecast regulatory depreciation amounts for the 2024–29 period by $20.6 million (3.7%) to $579.2 million and $4.0 million (6.6%) to $65.1 million ($ nominal) for its distribution and transmission networks respectively.

The increases are primarily the result of our draft decision on the calculation of a lower expected inflation rate (Attachment 3), which affects the projected RAB over the 2024–29 period. The magnitude of the increase, however, is reduced by our draft decision reductions to forecast capex over the 2024–29 period (Attachment 5). Our assessment of Ausgrid's proposed treatment of reverse depreciation for property disposals, standard asset lives and remaining assets lives; and our draft decision for a new 'Composite poles' asset class are discussed in the following subsections.

[24] We have analysed the sensitivity of straight-line depreciation relative to total revenue based on input data provided in Ausgrid's proposal PTRMs.

4.4.1 Property disposals affordability program

We accept Ausgrid's proposed treatment for reallocating the negative residual RAB values from its existing property asset classes due to its property disposals to a dedicated asset class for reverse depreciation purposes.

As part of its 'Property sales strategy to help with affordability' program, Ausgrid proposed to return the benefits it received from its property sales in the 2019–24 period back to customers in the next period.[25] These property sales were treated as asset disposals and therefore removed from the RAB for various asset classes.[26] This is discussed in Attachment 2.

Ausgrid's proposed asset disposals associated with the existing distribution and transmission 'Land (non-system)' asset class have resulted in negative residual closing RAB values of $282.8 million (for distribution) and $39.5 million (for transmission) ($ nominal) as at 30 June 2024. For non-depreciating assets such as land, the negative value would remain in the RAB (resulting in a reduction to the return on capital building block each year) until additional expenditure of land was incurred to turn the asset class value positive. Ausgrid proposed to reallocate these negative residual closing RABs to a new 'Land (non-system) depreciation' asset class for reverse depreciation purposes by returning the negative amounts to customers in the 2024–29 period.[27] It assigned a remaining asset life of 5 years to this new asset class, which has the effect of providing a negative adjustment to the straight-line depreciation component of the regulatory depreciation building block over the 2024–29 period. Ausgrid's proposed reverse depreciation treatment reduces its 2024–29 total unsmoothed revenue by $300.0 million and $42.0 million ($ nominal) for its distribution and transmission networks respectively.[28]

Where there is a negative residual closing RAB value and it was expected to remain that way for the foreseeable future, our standard approach is to remove the negative RAB value by returning the amount back to customers over the regulatory control period consistent with the RFM treatment. The alternative is that the negative RAB value would provide a small discount to customers over a longer period. Therefore, we consider Ausgrid's proposed treatment is reasonable and also consistent with our approach for similar assets in previous decisions.

However, our draft decision updated the final year asset adjustment reallocation amounts to $264.2 million (for distribution) and $37.0 million (for transmission) for reverse depreciation purposes. This is to reflect our amended draft decision distribution and transmission closing RABs as at 30 June 2024 (see Attachment 2 for updates).

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25 Ausgrid, *2024–29 Regulatory Proposal*, January 2023, p. 52.

26 Ausgrid's property sales affected the 'Land and easements' and 'Buildings (system)' distribution asset classes; and the 'Buildings (non-system)' and 'Land (non-system)' distribution and transmission asset classes. However, only the asset disposals for the 'Land (non-system)' asset class were large enough to result in a negative residual RAB value.

27 The same treatment was applied to the negative residual closing TAB values as at 30 June 2024. This is a RAB and TAB reallocation and does not affect the total value of the opening RAB or TAB as at 1 July 2024.

28 This revenue impact includes the proposed treatment for the negative residual closing RAB and TAB values.

4.4.2 Standard asset lives

We accept Ausgrid's proposed standard asset lives for its existing asset classes in respect to the forecast capex to be incurred in the 2024–29 period. We also accept the proposed four new distribution and three new transmission asset classes of 'Leases (network)' for distribution; and 'Leases (non-network)', 'Enterprise resource platform' and 'Land (non-system) depreciation' for distribution and transmission, including their standard asset lives.

We consider that Ausgrid's proposed standard asset lives for its existing asset classes remain appropriate for the 2024–29 period. This is because they are consistent with those approved for the 2019–24 period and are largely comparable with the standard asset lives used by other network businesses for similar asset classes.

Ausgrid proposed four new distribution and three new transmission asset classes for the 2024–29 period:

- **Leases (7 years)** – For distribution and transmission, Ausgrid proposed three new asset classes for capitalised leases, to give effect to a change in accounting standards (AASB 16). The proposed new asset classes and the standard asset lives are:
  - For distribution – 'Leases (network)' asset class with a proposed standard asset life of 7 years.[29]
  - For distribution and transmission – 'Leases (non-network)' asset class with a proposed standard asset life of 7 years.

  We accept Ausgrid's proposed new asset classes for capitalised leases and their standard asset lives. In its response to our information request, Ausgrid clarified that the proposed standard asset life of 7 years for all new network and non-network leases is based on the average expected lease term for new property leases, which is generally within the range of 5 to 10 years.[30] We are therefore satisfied that the proposed standard asset lives reasonably reflects the expected economic lives for the new lease asset classes.

  As discussed in Attachment 2, our draft decision is to capitalise any existing leases into the RAB as a final year asset adjustment as at 30 June 2024. For the 'Distribution leases (network)', 'Distribution leases (non-network)' and 'Transmission leases (non-network)' asset classes, Ausgrid proposed respective remaining asset lives of 11.4 years, 2 years and 2 years as at 30 June 2024. In its response to our information request, Ausgrid advised that these values were incorrect as they reflected the remaining asset lives at the beginning of the 2019–24 period rather than at the end of the period.[31]
  - For the distribution network leases, we amended the proposed remaining asset life to 8.4 years from 11.4 years.
  - For the distribution and transmission non-network leases, the proposed capitalisation values were removed. This is because the non-network leases will

29 Ausgrid's transmission network already has a 'Leases (network) asset class.

30 Ausgrid, *Response to information request IR052*, 27 July 2023.

31 Ausgrid, *Response to information request IR038*, 21 June 2023.

expire by 30 June 2024. Accordingly, we record the remaining asset lives as not applicable in the PTRM.

- **Enterprise resource platform (15 years)** – For distribution and transmission, Ausgrid proposed a new 'Enterprise resource platform' (ERP) asset class for allocating forecast capex over the 2024–29 period associated with the software upgrade of its business system operations. It proposed a standard asset life of 15 years for this new asset class. We accept Ausgrid's proposed new 'ERP' asset class and standard asset life.

  Ausgrid noted that the forecast capex for this new 'ERP' asset class would normally be allocated to its existing 'IT systems' or 'In-house software' asset classes, both of which have a standard asset life of 5 years. However, given that ERP systems comprise of typically longer-lived assets for its functional complexity, a standard asset life of 5 years does not reflect the economic life of this asset. At Ausgrid's draft proposal stage, stakeholders supported a depreciation period for ERP that was longer than 5 years.[32] We are therefore satisfied that the proposed standard asset life of 15 years reasonably reflects the expected economic asset life for its new 'ERP' asset class.

- **Land (non-system) depreciation** – For distribution and transmission, Ausgrid proposed a new 'Land (non-system) depreciation' asset class and did not assign a standard asset life in its proposed PTRM. As discussed in section 4.4.1, our draft decision is to accept this new asset class which was created to provide for reverse depreciation of the negative residual closing RAB values as at 30 June 2024. As such, there is no forecast capex allocated to this asset class for the 2024–29 period, and in turn, no asset life is required for depreciation purposes. We therefore agree with Ausgrid not to assign a standard asset life to this asset class.

- **Composite poles (80 years)** – In addition, we consider a new asset class for 'Composite poles' should be introduced following our review of Ausgrid's' proposed capex for poles (discussed in Attachment 5). Our draft decision is to assign a standard asset life of 80 years for this new asset class and is informed by our assessment of the expected technical life for composite poles.[33] The forecast capex associated with Ausgrid's composite poles proposal were allocated across the existing:

  – distribution asset classes of 'Distribution lines and cables', 'Low voltage lines and cables', 'Sub-transmission lines and cables' and 'Substations' with an average standard asset life of 45.5 years
  – transmission asset classes of '132kV wood pole lines', 'Transmission substation equip 132/66kV' and 'Zone substation equip 132/66kV' with an average standard asset life of 42.5 years.

  We consider this capex should be allocated to a new asset class of 'Composite poles' to provide for a depreciation schedule that better reflects the nature and economic life of this type of assets.

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32 Ausgrid, *2024–29 Regulatory Proposal*, January 2023, p. 57.

33 Martin Erlandsson, *Comparison of the environmental impacts from utility poles of different materials,* November 2011, p. 14.

Reallocating the composite poles capex to the new asset class for depreciation purposes, all things being equal, results in a total reduction of $1.0 million ($ nominal) to Ausgrid's' proposal.

- **Equity raising cost** – The standard asset life for the 'Equity raising costs' asset class needs to be reviewed each regulatory control period. We consider the standard asset life for this asset class should reflect the lives of the mix of assets making up the approved forecast net capex, because the equity raising cost benchmark is associated with that forecast.[34] However, no equity raising cost have been determined in our draft decision modelling. This is because Ausgrid does not satisfy the requirements to incur benchmark equity raising costs associated with the approved forecast capex. Accordingly, we record the standard asset life as not applicable in the PTRM for this draft decision.

Table 4.5 and Table 4.6 set out our draft decision on Ausgrid's standard asset lives for the 2024–29 period for its distribution and transmission networks respectively. We are satisfied that:[35]

- the standard asset lives and depreciation approach more broadly would lead to a depreciation schedule that reflects the nature of the assets over the economic lives of the asset classes, and
- the sum of the real value of the depreciation attributable to the assets is equivalent to the value at which the assets were first included in the RAB for Ausgrid.

4.4.3 Remaining asset lives

We accept Ausgrid's proposed weighted average method to calculate the remaining asset lives as at 1 July 2024. The proposed method is a continuation of the approved approach used in the 2019–24 determination and applies the approach as set out in the RFM. In accepting the weighted average method, we have updated Ausgrid's remaining asset lives to reflect our adjustments to the proposed RFM (Attachment 2). This is because changes affecting the RAB value in the RFM in turn impact the calculation of the remaining asset lives as at 1 July 2024.

Further, in its proposed RFMs, Ausgrid did not include actual capex inputs for 2014–19 in the 'RAB remaining lives' worksheet to calculate the remaining asset lives as at 1 July 2024 under the weighted average method. Our draft decision approach therefore is to add the required inputs to calculate the remaining asset lives as at 1 July 2024. This is consistent with the approach determined in our RFM handbook for electricity distribution businesses.[36] This results in a decrease to Ausgrid's proposed regulatory depreciation building block amount by $18.7 million (3.3%) and $2.5 million (4.2%) for its distribution and transmission networks respectively, due to small increases in the remaining asset lives for various asset classes.

For this draft decision, the remaining asset lives as at 1 July 2024 reflect estimated capex values for 2022–23 and 2023–24. As part of the final decision, we will update the 2022–23

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34 For this reason, we used forecast net capex as the weights to establish the weighted average standard asset life for amortising equity raising costs.

35 NER, cll. 6.5.5(b)(1)–(2).

36 AER, *Appendix F – Distribution roll forward model handbook – Electricity*, April 2020, pp. 35–36.

estimated capex with actuals and the 2023–24 estimated capex may be revised based on more up-to-date information from Ausgrid in its revised proposal. Therefore, we will recalculate Ausgrid's remaining asset lives as at 1 July 2024 using the method approved in this draft decision to reflect the revised capex inputs for the final decision.

Table 4.5 and Table 4.6 set out our draft decision on Ausgrid's remaining asset lives for the 2024–29 period.

Table 4.5 AER's draft decision on Ausgrid's remaining and standard asset lives as at 1 July 2024 – distribution (years)

Asset class	Remaining asset life	Standard asset life
Sub-transmission lines and cables	28.4	46.3
Cable tunnel (dx)	58.0	70.0
Distribution lines and cables	41.3	58.0
Substations	29.2	46.8
Transformers	25.0	45.9
Low voltage lines and cables	37.5	52.1
Customer metering and load control	4.5	25.0
Customer metering (digital)	5.0	n/a
Communications (digital) - dx	6.5	10.0
Total communications	5.0	10.2
System IT (dx)	6.2	7.0
Ancillary substation equipment (dx)	10.3	15.0
Land and easements	n/a	n/a
Furniture, fittings, plant and equipment	9.4	17.4
Land (non-system)[a]	n/a	n/a
Other non-system assets	22.3	29.4
IT systems	4.2	5.0
Motor vehicles	8.5	10.2
Land (non-system) depreciation[a]	5.0	n/a
Enterprise resource platform[b]	n/a	15.0
Distribution leases (network)	8.4	7.0
Distribution leases (non-network)[b]	n/a	7.0
Composite poles[b]	n/a	80.0

Asset class	Remaining asset life	Standard asset life
Buildings (system)	44.8	46.8
Buildings (non-system)	27.7	35.9
In-house software	3.6	5.0
Equity raising costs[c]	33.4	n/a

Source: AER analysis.
n/a not applicable. We have not assigned a standard asset life to the 'Land and easements' and 'Land (non-system)' asset classes because the capex allocated to them are not subject to depreciation. We have also not assigned a standard asset life to the 'Customer metering (digital)' asset classes as it has no forecast capex for the 2024–29 period.
(a) We have not assigned a standard asset life to the new 'Land (non-system) depreciation' asset class as this is used is for reverse depreciation purposes with a remaining asset life of 5 years to remove the negative closing RAB value as at 30 June 2024.
(b) The 'Enterprise resource platform', 'Distribution leases (non-network)' and 'Composite poles' asset classes are new and does not have an opening RAB value as at 1 July 2024 so it has no remaining asset life at this time.
(c) For this draft decision, the forecast capex determined for Ausgrid does not meet a level to trigger any benchmark equity raising costs and is therefore not assigned a standard asset life.

Table 4.6 AER's draft decision on Ausgrid's remaining and standard asset lives as at 1 July 2024 – transmission (years)

Asset class	Remaining asset life	Standard asset life
Transmission & zone land & easements	n/a	n/a
Transmission buildings 132/66kV	39.2	60.0
Zone buildings 132/66kV	40.7	60.0
Transmission transformers 132/66kV	31.0	50.0
Zone transformers 132/66kV	30.7	50.0
Transmission substation equip 132/66kV	29.5	45.0
Zone substation equip 132/66kV	29.8	45.0
Ancillary substation equipment (tx)	8.0	15.0
132kV tower lines	45.1	60.0
132kV concrete & steel pole lines	38.1	55.0
132kV wood pole lines	31.9	45.0
132kV feeders underground	30.3	45.0
Cable tunnel (tx)	50.8	70.0
Network control & com systems	7.5	37.2
Communications (digital) - tx	6.7	10.0

Asset class	Remaining asset life	Standard asset life
System IT (tx)	5.0	7.0
IT systems	4.2	5.0
Furniture, fittings, plant and equipment	9.4	17.4
Motor vehicles	8.6	10.2
Land (non-system)[a]	n/a	n/a
Other non-system assets	22.2	29.4
Transmission leases (network)	45.3	50.0
Land (non-system) depreciation[a]	5.0	n/a
Enterprise resource platform[b]	n/a	15.0
Transmission leases (non-network)[b]	n/a	7.0
Composite poles[b]	n/a	80
Buildings (system)	57.6	60.0
Buildings (non-system)	26.6	35.9
In-house software	3.7	5.0
Equity raising costs[c]	31.7	n/a

Source: AER analysis.

n/a not applicable. We have not assigned a standard asset life to the 'Transmission & zone land & easements' and 'Land (non-system)' asset classes because the capex allocated to them are not subject to depreciation.

(a) We have not assigned a standard asset life to the new 'Land (non-system) depreciation' asset class as this is used for reverse depreciation purposes with a remaining asset life of 5 years to remove the negative closing RAB value as at 30 June 2024.

(b) The 'Enterprise resource platform', 'Transmission leases (non-network)' and 'Composite poles' asset classes are new and does not have an opening RAB value as at 1 July 2024, so it has no remaining asset life at this time.

(c) For this draft decision, the forecast capex determined for Ausgrid does not meet a level to trigger any benchmark equity raising costs and is therefore not assigned a standard asset life.

Shortened forms

Term	Definition
AER	Australian Energy Regulator
CAPEX	capital expenditure
CPI	consumer price index
ERP	enterprise resource platform
NPV	net present value
NER	National Electricity Rules
OPEX	operating expenditure
PTRM	post-tax revenue model
RAB	regulatory asset base
RFM	roll forward model
WACC	weighted average cost of capital
WARL	weighted average remaining life