Draft Decision

TasNetworks Electricity Distribution Determination 2024 to 2029

(1 July 2024 to 30 June 2029)

Attachment 4
Regulatory depreciation

September 2023

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 TasNetworks, we make determinations on the indexation of the regulatory asset base (RAB) and depreciation building blocks for TasNetworks' 2024–29 regulatory control period.[1] 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 the regulatory depreciation amount for TasNetworks' distribution network. It also presents our draft decision on the proposed depreciation schedules, including an assessment of the proposed standard asset lives used for calculating straight-line depreciation.

4.1 Draft decision

We determine a regulatory depreciation amount of $479.1 million ($ nominal) for TasNetworks for the 2024–29 period. TasNetworks proposed a regulatory depreciation amount of $362.4 million ($ nominal).[2] Our draft decision represents an increase of $116.8 million (32.2%) on the proposed amount.

This increase is primarily the result of our draft decision to correct the commencement date for the year-by-year tracking approach to 2012–13 instead of 2019–20 as proposed by TasNetworks in the depreciation module.[3] Our draft decision to correct/update other inputs in the depreciation module,[4] and to update to the expected inflation rate for the 2024–29 period (Attachment 3) which affects the projected RAB and RAB indexation over this period,[5] has also impacted the regulatory depreciation amount.

The change to the commencement date for the year-by-year tracking approach and other corrections we made to the depreciation module increases the forecast straight-line

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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 TasNetworks*, TasNetworks-Post Tax Revenue Model - Standard Control -Dec 22-Public,* January 2023.

3 This correction is required as the 2012–13 commencement date of the tracking approach for capex incurred after this date was approved in the 2017–19 distribution determination. This commencement date must be maintained in the depreciation module for the correct implementation of the tracking approach for the 2024–29 period. Our detailed assessment of this issue is set out in section 4.1.1.

AER, *TasNetworks distribution determination 2017–19, overview, April 2017*, p. 23.

AER, *TasNetworks 2017-19 - RAB and tax depreciation model (Baseline Method), April 2017*

4 These corrections are the same as those made to the roll forward model (RFM) and must be reflected in the depreciation module. This includes corrections to the 2018–19 actual gross capex value, actual inflation rate, adjustments for the difference and the return on that difference between the actual and forecast net capex for the final year (2018–19) of the previous 2017–19 period, and the rate of return values. Our detailed assessment is set out in attachment 2 of this draft decision.

5 Expected inflation is used to calculate the RAB indexation. Since regulatory depreciation is calculated by subtracting RAB indexation from the straight-line depreciation, a lower RAB indexation increases the regulatory depreciation, all else being equal.

depreciation compared to the proposal for the 2024–29 period. The indexation of the RAB is lower than the proposal, largely due to applying a lower expected inflation rate of 2.80% per annum in this draft decision compared to TasNetworks' proposal of 3.35% per annum. Overall, the forecast straight-line depreciation is $46.6 million higher than the proposal, while the lower RAB indexation further increases the regulatory depreciation (since indexation is deducted from straight-line depreciation) by $70.2 million.

For our draft decision on TasNetworks' regulatory depreciation:

- We accept TasNetworks' proposed straight-line depreciation method used to calculate the regulatory depreciation amount.
- We accept TasNetoworks' proposal to continue applying the year-by-year tracking approach to implement straight-line depreciation of its existing assets and its forecast capital expenditure (capex). However, we corrected the commencement date for the tracking approach to 2012–13 instead of the 2019–20 date proposed by TasNetworks to be consistent with the 2017–19 distribution determination. We also corrected a number of other inputs in the proposed depreciation module (section 4.4.1).
- We accept TasNetworks' proposed asset classes and standard asset lives, with the exception of the standard asset life for the 'Equity raising costs' asset class (section 4.4.2).
- We introduce a new asset class for 'Composite poles' and assign a standard asset life after our review of TasNetworks' proposed capex for poles (section 4.4.1).

We made determinations on other components of TasNetworks' proposal which affect the forecast regulatory depreciation—for example, the opening RAB at 1 July 2024 (Attachment 2), expected inflation (Attachment 3), and forecast capex (Attachment 5) including its effect on the projected RAB over the 2024–29 period.[6]

Table 4.1 sets out our draft decision on the annual regulatory depreciation amount for TasNetworks' 2024–29 period.

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

	2024–25	2025–26	2026–27	2027–28	2028–29	Total
Straight-line depreciation	145.7	156.6	165.6	169.8	175.6	813.4
Less: inflation indexation on opening RAB	62.8	65.0	67.2	68.9	70.4	334.3
Regulatory depreciation	**82.9**	**91.6**	**98.4**	**101.0**	**105.2**	**479.1**

Source: AER analysis.

6 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.

4.2 TasNetworks' proposal

For the 2024–29 period, TasNetworks proposed a total forecast regulatory depreciation amount of $362.4 million ($ nominal). To calculate the depreciation amount, TasNetworks proposed to use:[7]

- the straight-line depreciation method employed in the AER's post-tax revenue model (PTRM)
- the closing RAB value at 30 June 2024 derived from the AER's roll forward model (RFM)
- the forecast capex for the 2024–29 period proposed by TasNetworks
- an expected inflation rate of 3.35% per annum for the 2024–29 period
- the AER's year-by-year tracking depreciation module in the RFM, which implements the straight-line method to calculate the forecast depreciation (over the 2024–29 period) of the opening RAB at 1 July 2024, with a commencement date of 2019–20 for the tracking approach
- with the exception of the 'Equity raising costs' asset class, TasNetworks proposed the same asset classes and standard asset lives for depreciating its forecast capex for the 2024–29 period as those approved in the 2019–24 distribution determination. TasNetworks proposed a standard asset life of 41.1 years for the 'Equity raising costs' asset class.

Table 4.2 sets out TasNetworks' proposed regulatory depreciation amount for the 2024–29 period.

Table 4.2 TasNetworks' proposed regulatory depreciation for the 2024–29 period ($million, nominal)

	2024–25	2025–26	2026–27	2027–28	2028–29	Total
Straight-line depreciation	136.3	145.4	157.1	163.6	164.3	766.8
Less: inflation indexation on opening RAB	74.4	77.8	81.4	84.1	86.8	404.5
Regulatory depreciation	**61.9**	**67.6**	**75.7**	**79.5**	**77.6**	**362.4**

Source: TasNetworks, *TasNetworks-Post Tax Revenue Model – Standard Control -Dec 22-Public,* 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

[7] TasNetworks, *TasNetworks-Roll Forward Model - Standard Control -Dec 22-Public,* January 2023. TasNetworks, *TasNetworks-Depreciation Model - Standard Control-Dec 22-public*, January 2023. TasNetworks, *TasNetworks-Post Tax Revenue Model - Standard Control -Dec 22-Public*, January 2023.

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

value of assets included in the RAB at the beginning of the regulatory year, and by the depreciation schedules.[9]

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 TasNetworks' 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 depreciation of existing assets in the opening RAB as at 1 July 2024—calculated in a separate year-by-year tracking depreciation module.

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9 NER, cl. 6.5.5(a).

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 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.

Our draft decision on TasNetworks' regulatory depreciation amount reflects our determinations on the opening RAB at 1 July 2024, expected inflation rate and forecast capex (the first three building block components in the above list).[15] Our determinations on these components of TasNetworks' proposal are discussed in Attachments 2, 3 and 5 respectively.

In this attachment, we assess TasNetworks' 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' (WARL) 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.

TasNetworks has proposed to continue to apply the year-by-year tracking approach approved in the 2017–19 distribution determination[16] to calculate the straight-line depreciation of its opening RAB as at 1 July 2024.[17] Our assessment of TasNetworks' proposed implementation of the year-by-year tracking approach is discussed in section 4.4.1.

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

16 AER, *TasNetworks distribution determination 2017–19, Overview, April 2017*, p. 23.

AER - *TasNetworks 2017-19 - RAB and tax depreciation model (Baseline Method) - April 2017*; AER, *TasNetworks distribution determination 2019–24, Attachment 4, April 2019*, p. 6.

AER, *TasNetworks 2019-24 - Distribution - Final decision - Depreciation Model - April 2019*.

17 TasNetworks*, TasNetworks-Roll Forward Model - Standard Control -Dec 22-Public,* January 2023.
TasNetworks, *TasNetworks-Depreciation Model - Standard Control-Dec 22-public*, January 2023.
TasNetworks, *TasNetworks-Post Tax Revenue Model - Standard Control -Dec 22-Public*, January 2023.

4.3.2 Interrelationships

The regulatory depreciation amount is a building block component of the annual revenue requirement.[18] 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 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.[19]

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.[20] The return on capital building block has to be calculated using a nominal rate of return applied to the opening RAB.[21] 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.[22] 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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18 The PTRM distinguishes between straight-line depreciation and regulatory depreciation, where regulatory depreciation is the straight-line depreciation less the indexation adjustment.

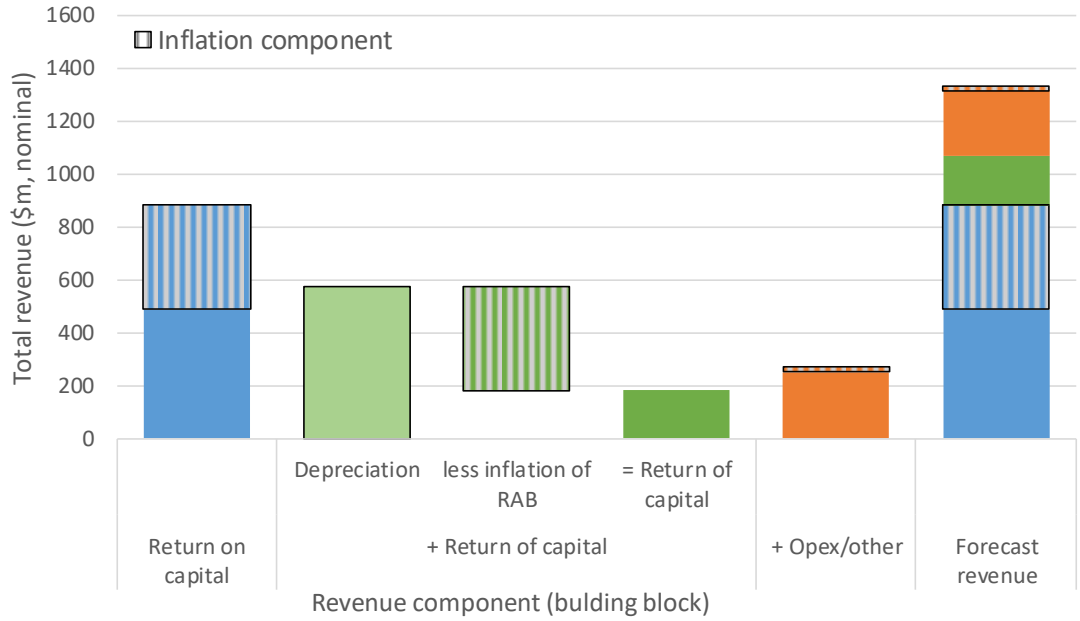
19 This is generally the case because the reduction in the RAB amount feeds into the higher depreciation building block, whereas the reduced return on capital building block is proportionate to the lower RAB multiplied by the WACC.

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

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

22 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 straight-line depreciation in such circumstances.

Figure 4.1 Inflation components 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.[23] 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.[24] 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 prices shocks when the asset is replaced at the end of its life.[25]

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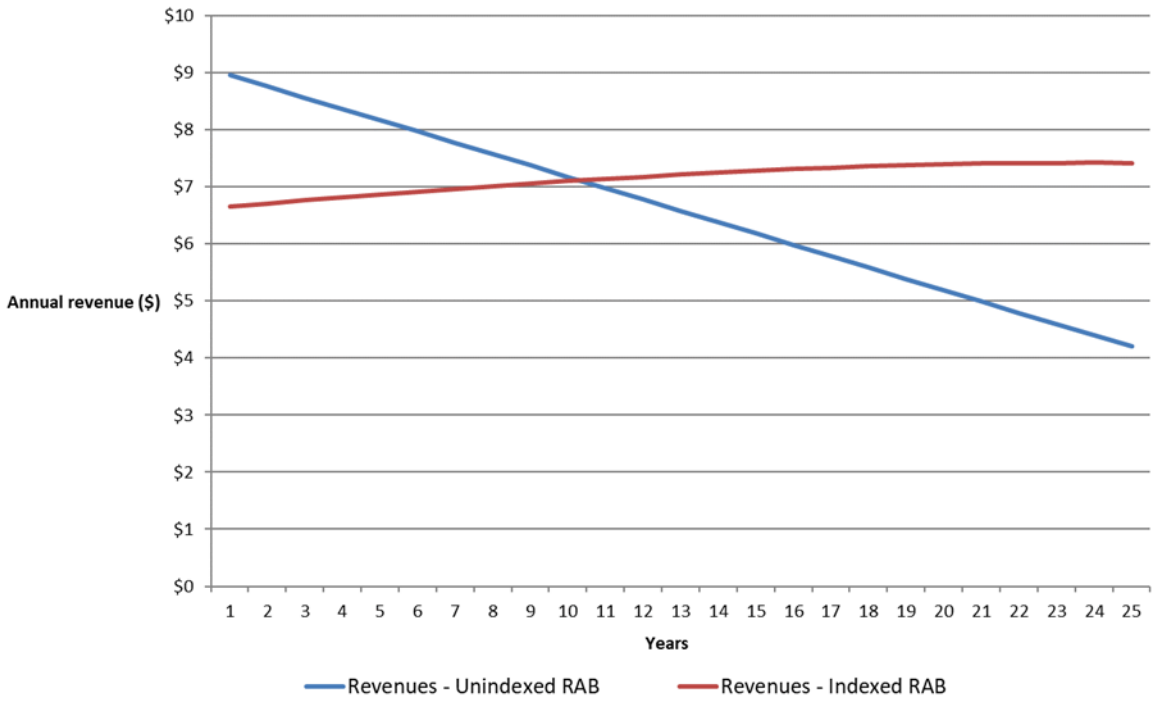
23 A change of approach from an indexed RAB to an un-indexed RAB would result in an initial step change increase in revenues to preserve net present value (NPV) neutrality.

24 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.

25 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 (in Attachment 2) shows the relative size of the inflation and straight-line depreciation, and their impact on the RAB based on TasNetworks' proposal. A 10% increase in the straight-line depreciation causes unsmoothed revenues ($ nominal) to increase by about 4.9%.[26]

4.4 Reasons for draft decision

We accept TasNetworks' proposed straight-line depreciation method for calculating the regulatory depreciation amount as set out in the PTRM. However, we increased TasNetworks' proposed forecast regulatory depreciation amount for the 2024–29 period by $116.8 million (32.2%) to $479.1 million ($ nominal).

This increase is primarily the result of our draft decision to correct the commencement date for the year-by-year tracking approach to 2012–13 instead of 2019–20 proposed by TasNetworks.[27] The magnitude of the increase, however, is slightly offset by our draft decision to reallocate forecast capex associated with composite poles from existing asset classes with an average standard asset life of 37.5 years to a new 'Composite poles' asset

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26 We have analysed the sensitivity of straight-line depreciation relative to total revenue based on input data provided in TasNetworks' proposal PTRM.

27 This correction is required as the 2012–13 commencement date of the tracking approach for capex incurred after this date was approved in the 2017–19 distribution determination. This commencement date must be maintained in the depreciation module for the correct implementation of the tracking approach for the 2024–29 period. Our detailed assessment of this issue is set out in section 4.1.1.

AER, *TasNetworks distribution determination 2017–19, Overview, April 2017*, p. 23.

AER - *TasNetworks 2017-19 - RAB and tax depreciation model (Baseline Method) - April 2017*

class with a standard asset life of 80 years.[28] Our draft decision to correct/update other inputs in the depreciation module and update to the expected inflation rate for the 2024–29 period (Attachment 3), which affects the projected RAB over this period,[29] have also impacted the regulatory depreciation amount.

Our assessment of TasNetworks' proposal to continue using the year-by-year tracking depreciation approach and its proposed standard asset lives are discussed in the following subsections.

4.4.1 Year-by-year tracking approach

TasNetworks proposed to continue using the year-by-year tracking approach for calculating the depreciation of its existing assets, consistent with that approved for previous regulatory control periods.[30]

For our draft decision, we accept TasNetworks' proposed year-by-year tracking approach meets the requirements of the NER in that it will result in depreciation schedules that:[31]

- reflect the nature of the assets and their economic life
- ensure that total depreciation (in real terms) equals the initial value of the assets
- allow the economic lives of existing assets to be consistent with those determined on a prospective basis in our 2019–24 distribution determination.

TasNetworks used our depreciation module in the RFM to implement year-by-year tracking. We have reviewed TasNetworks' application of this module and consider a correction is required for the commencement date of the year-by-year tracking approach to 2012–13 instead of 2019–20 proposed by TasNetworks. This corrected commencement date of the tracking approach is consistent with that approved in the 2017–19 distribution determination. Under the tracking approach, the commencement date of 2012–13 must be maintained in the depreciation module for the correct implementation to calculating straight-line depreciation going forward. This was also the case for the 2019–24 distribution determination.[32] In its response to our information request, TasNetworks agreed with our correction to the commencement date.[33]

We also updated the following inputs to the depreciation module to be consistent with those made to the RFM:

- the actual CPI for 2022–23 with the 2022 December quarter CPI published by the Australian Bureau of Statistics, which became available after TasNetworks submitted its

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28 This reallocation of capex reduces the forecast straight-line deprecation associated with these assets.

29 Expected inflation is used to calculate the RAB indexation. Since regulatory depreciation is calculated by subtracting RAB indexation from the straight-line depreciation, a lower RAB indexation increases the regulatory depreciation, all else being equal.

30 TasNetworks, *TasNetworks-Post Tax Revenue Model - Standard Control -Dec 22-Public*, January 2023.
AER, *TasNetworks 2019-24 - Distribution - Final decision - Depreciation Model,* April 2019.

31 NER, cl. 6.5.5(b).

32 AER, *TasNetworks distribution determination 2019–24, Attachment 4*, April 2019, p. 6.
AER, *TasNetworks 2019-24 - Distribution - Final decision - Depreciation Model,* April 2019.

33 TasNetworks, *Response to AER IR#029*, 11 May 2023.

proposal. The estimated CPI for 2023–24 has also been updated with the latest forecast inflation published in the Reserve Bank of Australia's August *Statement on Monetary Policy*

- the nominal vanilla weighted average cost of capital (WACC) for 2023–24 and equity raising costs. These updates are required to reflect the 2023–24 return on debt update in the PTRM for the 2019–24 period, which became available after TasNetworks submitted its proposal
- various other inputs, such as historical capex amounts and rate of return values.[34]

While most of the updates we made have a relatively moderate impact on the forecast straight-line depreciation, the correction for the commencement date of the year-by-year tracking approach has materially increased the forecast straight-line depreciation by around $48 million. This is because the later commencement of 2019–20 for the tracking approach proposed by TasNetworks resulted in an overstatement of depreciation in the 2019–24 period for capex incurred from 2012–13 to 2018–19. This means the proposed depreciation module incorrectly deducted more depreciation from the RAB over the 2019–24 period and this resulted in a lower forecast depreciation for the 2024–29 period. Our correction to the commencement date of 2012–13 removed this overstatement of the depreciation for the 2019–24 period. As a result, there is a higher forecast depreciation for the 2024–29 period compared to the proposal.

4.4.2 Standard asset lives

We accept TasNetworks' proposed standard asset lives, with the exception of the 'Equity raising costs' asset class because 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. We have calculated the standard asset life of equity raising costs by taking the weighted average of the standard asset lives of total forecast capex for each asset class over the 2024–29 period.

TasNetworks proposed the same standard asset lives for its existing asset classes in respect of the forecast capex to be incurred in the 2024–29 period, except for the 'Equity raising costs' asset class. We accept the unchanged asset lives as 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.

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.[35] Therefore, for this draft decision, we have calculated a standard asset life of 36.0 years which reflects the weighted average of the standard asset lives of all depreciable asset classes over the 2024–29 period. This compares to the 41.1 years standard asset life proposed by TasNetworks for this asset

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34 This includes corrections to 2018–19 actual gross capex value, actual inflation rate, adjustments for the difference and the return on that difference between the actual and forecast net capex for the final year (2018–19) of the previous 2017–19 period, and the rate of return values.

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

class.[36] TasNetworks agreed with the amended standard asset life in its response to our information request.[37]

In addition, we consider a new asset class for 'Composite poles' should be introduced following our review of TasNetworks' 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.[38]

The forecast capex associated with TasNetworks' composite poles proposal was allocated across the existing asset classes of 'Overhead sub-transmission lines (urban)', 'Overhead high voltage lines urban', 'Overhead high voltage lines rural', 'Distribution substations LV (pole)', 'Overhead low voltage lines underbuilt urban', 'Overhead low voltage lines underbuilt rural', 'Overhead low voltage lines urban' and 'Overhead low voltage lines rural' with an average standard asset life of 37.5 years. However, 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.

As a result of reallocating the composite poles capex to the new asset class for depreciation purposes, all things being equal, there is a reduction of $1.6 million ($ nominal) to TasNetworks' proposal.

Table 4.3 sets out our draft decision on TasNetworks' standard asset lives for the 2024–29 period. We are satisfied that:[39]

- 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 TasNetworks.

36 We note that forecast equity raising costs for the 2024–29 period is $0.22 million. Therefore, the change to the standard asset life has no material impact on the forecast total revenue.

37 TasNetworks, *Response to AER IR#029*, 11 May 2023.

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

39 NER, cll. 6.5.5(b)(1)–(2).

Table 4.3 AER's draft decision on TasNetworks' standard asset lives at 1 July 2024 (years)

Asset class	Standard asset life
Overhead subtransmission lines (urban)	50.0
Underground subtransmission lines (urban)	60.0
Urban zone substations	40.0
Rural zone substations	40.0
SCADA	10.0
Distribution switching stations (ground)	40.0
Overhead high voltage lines urban	35.0
Overhead high voltage lines rural	35.0
Voltage regulators on distribution feeders	40.0
Underground high voltage lines	60.0
Underground high voltage lines SWER	60.0
Distribution substations HV (pole)	40.0
Distribution substations HV (ground)	40.0
Distribution substations LV (pole)	40.0
Distribution substations LV (ground)	40.0
Overhead low voltage lines underbuilt urban	35.0
Overhead low voltage lines underbuilt rural	35.0
Overhead low voltage lines urban	35.0
Overhead low voltage lines rural	35.0
Underground low voltage lines	60.0
Underground low voltage common trench	60.0
HVST service connections	40.0
HV service connections	40.0
HV metering CA service connections	40.0
HV/LV service connections	40.0
Business LV service connections	35.0
Business LV metering CA service connections	25.0
Domestic LV service connections	35.0

Asset class	Standard asset life
Domestic LV metering CA service connections	20.0
Emergency network spares	n/a
Motor vehicles	6.0
Minor assets	5.0
Non-system property	40.0
Spare parts	n/a
NEM assets	5.0
Business management systems	10.0
Land	n/a
Easements	n/a
Composite poles	80.0
Buildings	40.0
Equity raising costs	36.0

Source: AER analysis.

n/a not applicable. We have not assigned a standard asset life to the 'Easements' and 'Land' asset classes because the capex allocated to them are not subject to depreciation. We have also not assigned a standard asset life to the 'Emergency network spares' and 'Spare parts' asset classes because there is no forecast capex allocated to these asset classes for the 2024–29 period.

Shortened forms

Term	Definition
AER	Australian Energy Regulator
capex	capital expenditure
CPI	consumer price index
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 lives