Draft Decision

Essential Energy 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 Essential Energy (Essential), we make determinations on the indexation of the regulatory asset base (RAB) and depreciation building blocks for Essential's 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 Essential's regulatory depreciation amount. It also presents our draft decision on the proposed depreciation schedules, including an assessment of the proposed asset lives used for calculating straight-line depreciation.

4.1 Draft decision

We determine a regulatory depreciation amount of $594.2 million ($ nominal) for Essential for the 2024–29 period. Essential proposed a regulatory depreciation amount of $765.0 million ($ nominal).[2] Our draft decision represents a decrease of $170.8 million (22.3%) on the proposed amount.

This reduction is 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 $175.2 million higher than the proposal, largely due to applying a higher expected inflation rate of 2.80% per annum in this draft decision compared to Essential's proposal of 2.50% per annum. However, straight-line depreciation is $4.4 million (0.2%) higher than the proposal mainly due to the disaggregation and reallocation of capex associated with the 'Distributed energy resources' (DER) related asset classes. The higher RAB indexation has more than offset the increase in straight-line depreciation (since indexation is deducted from straight-line depreciation).

For our draft decision on Essential's regulatory depreciation:

- We accept Essential's proposed straight-line depreciation method used to calculate the regulatory depreciation amount.
- We accept Essential's proposed existing asset classes and standard asset lives.
- We do not accept Essential's proposed new DER asset class. We consider the 'DER' asset class should be disaggregated into four separate asset classes to reflect the different categories of assets and provide a better grouping of asset lives (section 4.4.1).
- We introduce a new asset class for 'Composite poles' and assign a standard asset life after our review of Essential's proposed capex for poles (section 4.4.1).

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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 Essential Energy, *5.04 Standard Control Post-Tax Revenue Model,* January 2023.

- We accept Essential'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 Essential's remaining asset lives to reflect our adjustments to the proposed roll forward model (RFM) (section 4.4.2).

We made determinations on other components of Essential'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.[3]

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

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

	2024–25	2025–26	2026–27	2027–28	2028–29	Total
Straight-line depreciation	376.2	410.3	434.8	456.8	482.9	2,161.0
Less: inflation indexation on opening RAB	287.4	300.5	313.3	326.3	339.3	1,566.9
Regulatory depreciation	**88.8**	**109.7**	**121.5**	**130.5**	**143.6**	**594.2**

Source: AER analysis.

4.2 Essential's proposal

For the 2024–29 period, Essential proposed a total forecast regulatory depreciation amount of $765.0 million ($ nominal). To calculate the depreciation amount, Essential proposed to use:[4]

- 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 RFM
- the forecast capex for the 2024–29 period proposed by Essential
- an expected inflation rate of 2.50% 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[5]

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3 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 Essential Energy, *5.04 Standard Control Post-Tax Revenue Model*, January 2023;
Essential Energy, *5.02 Standard Control Roll Forward Model*, January 2023.

5 Essential Energy, *5.01 Our revenue requirement components*, January 2023, p. 4.

- 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. Essential proposed a new 'Distributed energy resources' asset class with a standard asset life of 30.6 years, calculated based on the weighted average proportion of the proposed forecast capex for each asset category in the DER asset class.

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

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

	2024–25	2025–26	2026–27	2027–28	2028–29	Total
Straight-line depreciation	375.5	409.5	433.9	455.9	481.9	2,156.6
Less: inflation indexation on opening RAB	256.9	267.8	278.4	289.0	299.6	1,391.6
Regulatory depreciation	**118.6**	**141.6**	**155.6**	**166.9**	**182.3**	**765.0**

Source: Essential Energy, *5.04 Standard Control Post-Tax Revenue Model,* January 2023.

4.3 Assessment approach

We must determine the regulatory depreciation amount as part of determining a distributor's annual revenue requirement.[6] 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.[7]

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.[8] We must consider whether the proposed depreciation schedules conform to the following key requirements:

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

7 NER, cl. 6.5.5(a).

8 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.

- 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[9]
- 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.[10]

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.[11]

The regulatory depreciation amount is an output of the PTRM. We therefore assessed Essential'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[12]
- 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 Essential's 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).[13] Our determinations on these components of Essential's proposal are discussed in Attachments 2, 3 and 5 respectively.

In this attachment, we assess Essential'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:

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

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

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

12 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.

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

- 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.

Essential 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 of Essential's proposed remaining asset lives is discussed in section 4.4.2.

4.3.2 Interrelationships

The regulatory depreciation amount is a building block component of the annual revenue requirement.[14] 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.[15]

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.[16] The return on capital building block has to be calculated using a nominal rate of return applied to the opening RAB.[17] 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

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

15 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.

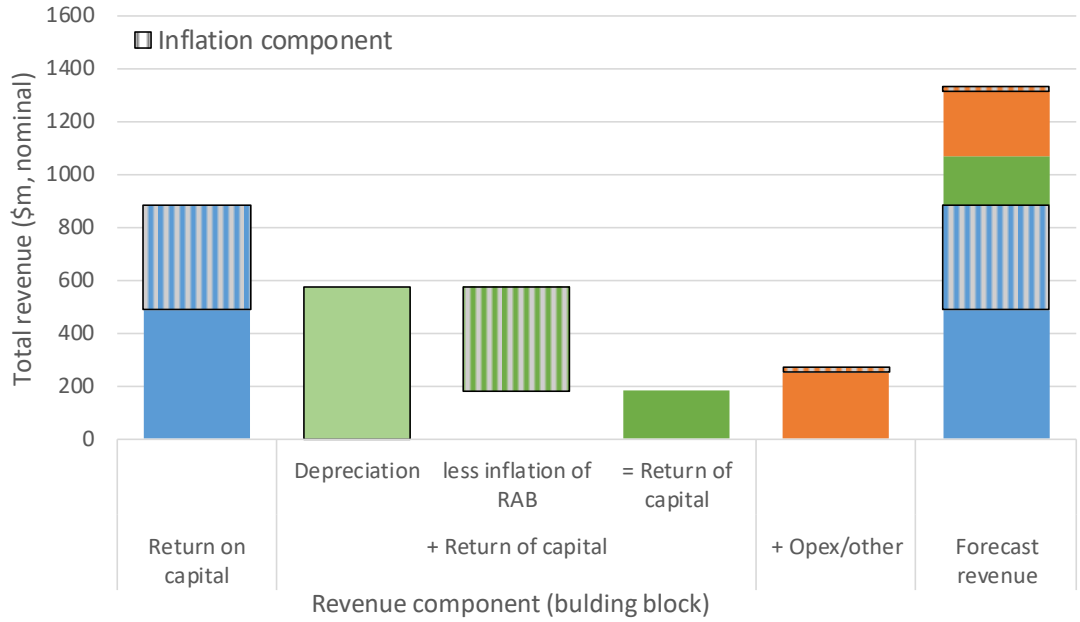
16 NER, cl. 6.2.3(c)(4).

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

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.[18] 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.

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.[19] Under both approaches, the

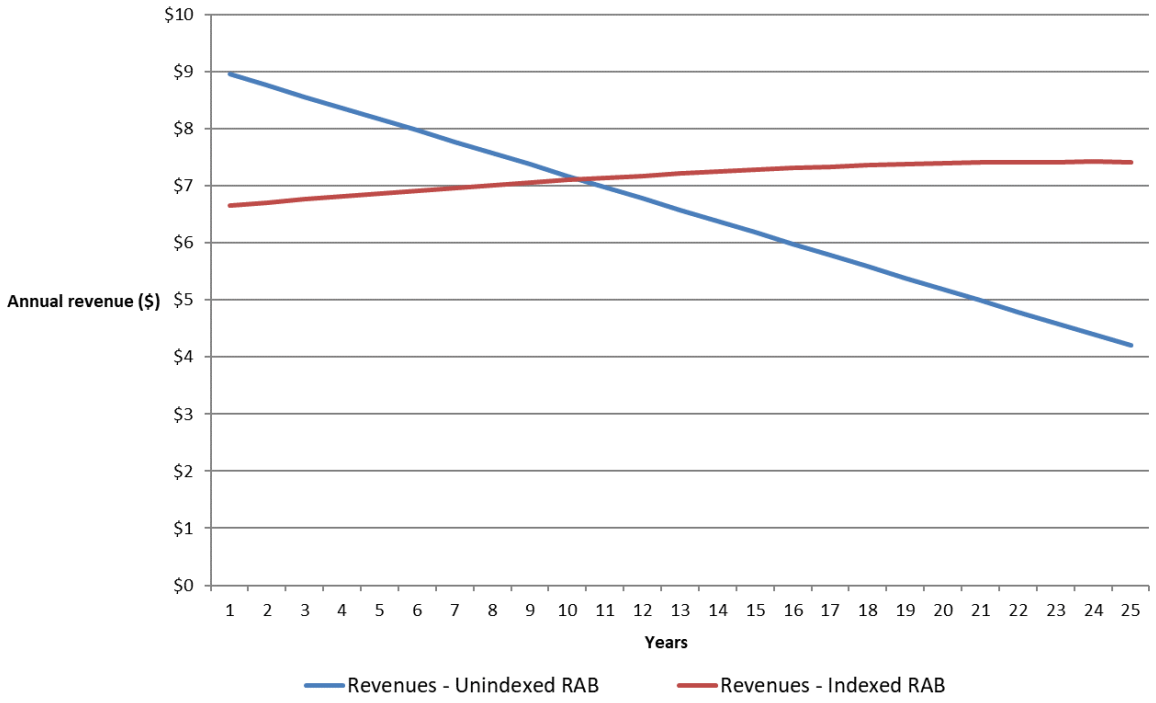
[18] If the asset lives are extremely long, such that the RAB depreciation rate is lower than the inflation rate, then negative regulatory depreciation can emerge. The indexation adjustment is greater than the straight-line depreciation in such circumstances.

[19] 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.

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.[20] 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.[21]

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 Essential's proposal. A 10% increase in the straight-line depreciation causes unsmoothed revenues ($ nominal) to increase by about 3.6%.[22]

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20 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.

21 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.

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

4.4 Reasons for draft decision

We accept Essential's proposed straight-line depreciation method for calculating the regulatory depreciation amount as set out in the PTRM. However, we have decreased Essential's proposed forecast regulatory depreciation amount for the 2024–29 period by $170.8 million (22.3%) to $594.2 million ($ nominal).

This reduction is primarily the result of our draft decision on the calculation of a higher expected inflation rate (Attachment 3), which affects the projected RAB over the 2024–29 period. The magnitude of the reduction, however, is slightly offset by a higher straight-line depreciation in our draft decision due to the disaggregation and reallocation of capex associated with the 'Distributed energy resources' (DER) related asset classes. Our assessment of Essential's proposed new 'DER' asset class, standard asset lives and remaining asset lives; and our draft decision for a new 'Composite poles' asset class are discussed in the following subsections.

4.4.1 Standard asset lives

We accept Essential's proposed standard asset lives for its existing asset classes in respect of the forecast capex to be incurred in the 2024–29 period. However, we do not accept Essential's proposed new asset class and standard asset life for depreciating DER assets. We have instead created four separate asset classes and assigned standard asset lives to reflect the different categories of assets for DER.

We consider that Essential'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.

Essential proposed to create a new asset class for depreciating DER related assets with a standard asset life of 30.6 years, calculated based on the weighted average proportion of the proposed forecast capex for each asset category in the 'DER' asset class.

We note Essential's proposed approach is likely to cause issues in future distribution determinations for the following two reasons:

- Essential's proposed asset categories that make up the 'DER' asset class have a wide range of standard lives from 15 years to 40 years. The introduction of this new asset class with a weighted average standard asset life may not result in a depreciation profile that reflects the nature of the assets as required under the NER.[23]
- Essential's proposed weighted average approach for the calculation of the standard asset life is based on its proposed forecast capex for the asset categories that make up the 'DER' asset class. Forecast capex by category varies in each distribution determination, which would require us to re-weight the standard asset life for the 'DER' asset class periodically.

Based on these reasons, for our draft decision, we consider the proposed 'DER' asset class should be disaggregated into four separate asset classes to reflect the different categories of

[23] NER, cl. 6.5.5(b)(1).

assets and provide a better grouping of asset lives. We assessed the reasonableness of Essential's proposed standard lives for the various asset categories that make up the 'DER' asset class and consider that while some of the proposed asset lives were appropriate, others should be adjusted.

Table 4.3 shows Essential's proposed standard asset lives and our draft decision for the various asset categories that make up the 'DER' asset class.

Table 4.3 Standard asset lives of asset categories that make up the 'DER' asset class as at 1 July 2024 – Essential's proposal vs. AER's draft decision (years)

Essential's proposal		AER's draft decision	
Batteries	15	Batteries, inverters and control equipment[a]	10
Solar panels	25	Solar panels	20
Generators	20	Generators	20
Civil infrastructure installation & other	40	Civil infrastructure installation & other	40

Source: Essential, *Response to Information Request #002*, 28 Feb 2023; AER analysis.
(a) We grouped 'Batteries', 'Inverters' and 'Control equipment' into one asset class, discussed below.

We accept Essential's proposed standard asset lives for the categories associated with 'Generators' and 'Civil infrastructure installation & other':

- **Generators (20 years) –** Diesel generators are for backup purposes and therefore would be operated infrequently and for a relatively short period of time. With regular maintenance, these backup generators are usually expected to have a life expectancy of at least 20 years.
- **Civil infrastructure installation & other (40 years) –** This asset category is related to capital works such as site works, foundations, fencing, and structural components of an installation. In our previous determination for Powerlink[24], we approved a standard asset life of 40 years for this type of asset class.

However, we consider that the standard asset lives for the categories associated with 'Batteries' and 'Solar panels' should be shorter than Essential's proposal:

- **Batteries (10 years, instead of 15 years) –** The standard life of deep cycle lithium-ion batteries is largely dependent on their operating temperatures and depth of discharge. We consider that a standard asset life of 10 years for well-managed batteries cycled daily is acceptable, while a standard asset life of 15 years is unlikely to be achievable because the capacity of the batteries degrades to 60% of its original rated capacity after

[24] AER, *Final decision: Powerlink Queensland transmission determination 2022 to 2027,* April 2022, p. 82.

10 years.[25] This conclusion is also supported by Aurecon's consultation report for the Australian Energy Market Operator.[26]

- **Solar panels (20 years, instead of 25 years) –** Crystalline silicon-based solar panels degrade over time, and rather than reaching a point of failure they tend to progressively reduce their energy production capability as they age. Although the photovoltaic panels would likely produce energy beyond 20–25 years, we consider a standard asset life of 20 years provides a reasonable balance between the expected energy production capability meeting users' needs at this age and the potential for increasing functional obsolescence risk.

Essential also proposed a standard asset life of 15 years for 'Inverters' and 10 years for 'Control equipment' as part of its assessment for Standalone Power Systems. We consider that a standard asset life of 10 years is reasonable for both these asset categories. For inverters, a shorter asset life is appropriate because these assets are subject to more extreme operation environments than other network electronic equipment, which has a standard asset life of 15 years. In the case of control equipment, the proposed standard asset life of 10 years is reasonable because this equipment is a type of telemetry equipment, which is generally assigned an asset life of 10 years.

Based on our assessment, we consider that it is appropriate to group the asset categories of inverters, control equipment and batteries together into one asset class because they have the same standard asset life. Therefore, for this draft decision, we create a new asset class labelled 'Batteries, inverters and control equipment' and assign a standard asset life of 10 years to that asset class.

In its response to our information request, Essential agreed with our approach of disaggregating the 'DER' asset class into four separate asset classes and amendments to the standard asset lives.[27]

As a result of our changes to the proposed 'DER' asset class, all things being equal, total revenue for the 2024–29 period is $1.6 million ($ nominal) higher than Essential's proposal.

In addition, we consider a new asset class for 'Composite poles' should be introduced following our review of Essential'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 Essential's composite poles transition business case.[28]

The forecast capex associated with Essential's composite poles proposal is allocated across the existing asset classes of 'Sub-transmission lines and cables' 'Distribution lines and cables', 'Low voltage lines and cables' with an average standard asset life of 53 years. However, we consider this capex should be allocated to a new asset class of 'Composite

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25 Green Energy Markets, *Final projection for distributed energy resources – solar PV and stationary energy battery systems – report for AEMO,* December 2022, p. 62.

26 Aurecon, *2020 Costs and technical parameter review – consultation report for AEMO,* December 2020, p. 57.

27 Essential, *Response to Information Request #030*, 18 May 2023.

28 Essential, *10.02.24 Composite Poles Transition Business Case,* November 2022, pp. 5–6.

poles' to provide for a depreciation schedule that better reflects the nature and economic life of this type of assets.

In its response to our information request, Essential agreed with our approach of introducing the new 'Composite poles' asset class and longer standard asset life.[29]

Reallocating the composite poles capex to the new asset class for depreciation purposes, all things being equal, results in a reduction of $15.7 million ($ nominal) to Essential's proposal.

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.[30] However, no equity raising cost have been determined in our draft decision modelling. This is because Essential 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 4.4 sets out our draft decision on Essential's standard asset for the 2024–29 period. We are satisfied that:[31]

- 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 Essential.

4.4.2 Remaining asset lives

We accept Essential'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 Essential'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.

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 estimated capex with actuals and the 2023–24 estimated capex may be revised based on more up-to-date information from Essential in its revised proposal. Therefore, we will recalculate Essential'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 4.4 sets out our draft decision on Essential's remaining asset lives as at 1 July 2024.

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29 Essential, *Response to Information Request #047*, 10 August 2023.

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

31 NER, cll. 6.5.5(b)(1)–(2).

Table 4.4 AER's draft decision on Essential's remaining and standard asset lives as at 1 July 2024 (years)

Asset class	Remaining asset life	Standard asset life
Sub-transmission lines and cables	32.4	54.9
Distribution lines and cables	39.8	53.8
Substations	21.1	40.2
Transformers	28.5	45.8
Low voltage lines and cables	33.4	51.5
Customer metering and load control	18.5	25.9
Communications	5.4	7.0
Land	n/a	n/a
Easements	n/a	n/a
IT systems	4.1	5.0
Furniture, fittings, plant and equipment	8.9	13.0
Motor vehicles	5.9	8.0
Land (non-system)	n/a	n/a
Other non-system assets	3.4	15.0
Capitalised property leases	4.7	8.0
Batteries, inverters and control equipment	n/a	10.0
Solar panels	n/a	20.0
Generators	n/a	20.0
Civil infrastructure installation & other	n/a	40.0
Composite poles	n/a	80.0
Buildings	42.5	50.0
In-house software	2.6	5.0
Equity raising costs[a]	32.1	n/a

Source: AER analysis.

n/a not applicable. We have not assigned an asset life to the 'Land', 'Easements' and 'Land (non-system)' asset classes because the capex allocated to them are not subject to depreciation. The asset classes for 'Batteries, inverters and control equipment', 'Solar panels', 'Generators', 'Civil infrastructure installation & other' and 'Composite poles' are new and do not have opening RAB values as at 1 July 2024, so they have no remaining asset life at this time.

(a) For this draft decision, the forecast capex determined for Essential 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
DER	distributed energy resources
NER	National Electricity Rules
NPV	net present value
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