PRELIMINARY DECISION
United Energy distribution determination
2016 to 2020

Attachment 5 – Regulatory depreciation

October 2015

AUSTRALIAN ENERGY REGULATOR

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Note

This attachment forms part of the AER's preliminary decision on United Energy's revenue proposal 2016–20. It should be read with all other parts of the preliminary decision.

The preliminary decision includes the following documents:

Overview

Attachment 1 - Annual revenue requirement

Attachment 2 - Regulatory asset base

Attachment 3 - Rate of return

Attachment 4 - Value of imputation credits

Attachment 5 - Regulatory depreciation

Attachment 6 - Capital expenditure

Attachment 7 - Operating expenditure

Attachment 8 - Corporate income tax

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Contents

Shortened forms

Shortened form	Extended form
AEMC	Australian Energy Market Commission
AEMO	Australian Energy Market Operator
AER	Australian Energy Regulator
AMI	Advanced metering infrastructure
augex	augmentation expenditure
capex	capital expenditure
CCP	Consumer Challenge Panel
CESS	capital expenditure sharing scheme
CPI	consumer price index
DRP	debt risk premium
DMIA	demand management innovation allowance
DMIS	demand management incentive scheme
distributor	distribution network service provider
DUoS	distribution use of system
EBSS	efficiency benefit sharing scheme
ERP	equity risk premium
Expenditure Assessment Guideline	Expenditure Forecast Assessment Guideline for electricity distribution
F&A	framework and approach
MRP	market risk premium
NEL	national electricity law
NEM	national electricity market
NEO	national electricity objective
NER	national electricity rules
NSP	network service provider
opex	operating expenditure
PPI	partial performance indicators
PTRM	post-tax revenue model
RAB	regulatory asset base
RBA	Reserve Bank of Australia
repex	replacement expenditure

Shortened form	Extended form
RFM	roll forward model
RIN	regulatory information notice
RPP	revenue and pricing principles
SAIDI	system average interruption duration index
SAIFI	system average interruption frequency index
SLCAPM	Sharpe-Lintner capital asset pricing model
STPIS	service target performance incentive scheme
WACC	weighted average cost of capital

5 Regulatory depreciation

Depreciation is the allowance 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 United Energy, we make determinations on the indexation of the regulatory asset base (RAB) and depreciation building blocks for United Energy's 2016–20 regulatory control period.[1] The regulatory depreciation allowance is the net total of the straight-line depreciation (negative) and the indexation (positive) of the RAB.

This attachment sets out our preliminary decision on United Energy's regulatory depreciation allowance. It also presents our preliminary decision on the proposed depreciation schedules, including an assessment of the proposed standard asset lives and remaining asset lives to be used for forecasting the depreciation allowance.

5.1 Preliminary decision

We do not accept United Energy's proposed regulatory depreciation allowance of $388.2 million ($ nominal) for the 2016–20 regulatory control period.[2] Instead, we determine a regulatory depreciation allowance of $315.4 million ($ nominal) for United Energy. This amount represents a decrease of $72.7 million (or 18.7 per cent) on the proposed amount. In coming to this decision:

- We accept United Energy's proposed asset classes, its straight-line depreciation method, and the standard asset lives used to calculate the regulatory depreciation allowance.[3] We consider United Energy's proposed asset classes and standard asset lives are consistent with those approved at the 2011–15 distribution determination, and reflect the nature and economic lives of the assets (section 5.4.1).[4]
- We accept the creation of a new 'SCADA (10-year asset)' asset class. This asset class will contain SCADA, network control and protection system capex incurred from 1 January 2016. We also accept the proposed standard asset life for this new asset class (section 5.4.1).
- We accept the creation of a new non-depreciating 'Land' asset class. This asset class will contain any land related capex incurred from 1 January 2016 (section 5.4.1).
- We do not accept United Energy's proposed average depreciation method to calculate remaining asset lives at 1 January 2016. We have instead applied a weighted average remaining life (WARL) approach (section 5.4.2). The revised

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1 NER, cll. 6.12.1, 6.4.3.

2 United Energy, *Regulatory proposal*, April 2015, Document ID: REG3.2 (PTRM).

3 The standard asset lives are used to depreciate forecast capex.

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

remaining asset lives also reflect other adjustments to the RAB in the roll forward model (RFM), as discussed in attachment 2.

- We made determinations on other components of United Energy's proposal that also affect the forecast regulatory depreciation allowance—for example, the forecast capex (attachment 6), the opening RAB value (attachment 2) and the forecast inflation rate (attachment 3).[5]

Table 5.1 sets out our preliminary decision on the annual regulatory depreciation allowance for United Energy's 2016–20 regulatory control period.

Table 5.1 AER's preliminary decision on United Energy's depreciation allowance for the 2016–20 regulatory control period ($ million, nominal)

	2016	2017	2018	2019	2020	Total
Straight-line depreciation	105.7	115.0	126.4	129.0	125.8	601.9
Less: inflation indexation on opening RAB	51.3	54.4	57.5	60.3	63.0	286.5
Regulatory depreciation	**54.4**	**60.6**	**68.9**	**68.7**	**62.8**	**315.4**

Source: AER analysis.

5.2 United Energy's proposal

For the 2016–20 regulatory control period, United Energy proposed a total forecast regulatory depreciation allowance of $388.2 million ($ nominal). To calculate the depreciation allowance, United Energy proposed to use:[6]

- the straight-line depreciation method employed in our post-tax revenue model (PTRM)
- the closing RAB value at 31 December 2015 derived from our roll forward model (RFM)
- proposed forecast capex for the 2016–20 regulatory control period
- an average depreciation approach to determine remaining asset lives of existing assets at 31 December 2015[7]
- standard asset lives for depreciating new assets associated with forecast capex for the 2016–20 regulatory control period consistent with those approved in the 2011–15 distribution determination
- a new 'SCADA (10-year asset)' asset class to depreciate SCADA, network control and protection system capex incurred from 1 January 2016.

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5 NER, cl. 6.5.5(a)(1).

6 United Energy, *Regulatory proposal*, October 2014, pp. 100–102.

7 United Energy's proposed approach involved dividing the 2015 Written Down Value by annual deprecation in 2015. See: United Energy, *RE: Vic. EDPR – United Energy - IR#014 - 24 July 2015,* 29 July 2015.

Table 5.2 sets out United Energy's proposed depreciation allowance for the 2016–20 regulatory control period.

Table 5.2 United Energy's proposed depreciation allowance for the 2016–20 regulatory control period ($ million, nominal)

	2016	2017	2018	2019	2020	Total
Straight-line depreciation	121.4	136.9	148.7	137.2	145.8	690.0
Less: inflation indexation on opening RAB	51.7	56.1	60.5	64.7	68.8	301.8
Regulatory depreciation	**69.6**	**80.8**	**88.3**	**72.5**	**77.0**	**388.2**

Source: United Energy, *Regulatory proposal*, April 2015, Document ID: REG3.2 (PTRM).

5.3 AER's assessment approach

We determine the regulatory depreciation allowance using the PTRM as a part of a service provider'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]

Our standard approach to calculating depreciation is to employ the straight-line method set out in the PTRM. We consider the straight-line method satisfies the NER requirements in clause 6.5.5(b) as it provides an expenditure profile that reflects the nature of assets over their economic life.[10] 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. We must consider whether the proposed depreciation schedules conform to the following key requirements:

- the schedules depreciate using a profile that reflects the nature of the assets of 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 of category of assets was first included in the RAB for the relevant distribution system.[12]

If a service provider's building block proposal does not comply with the above requirements, then we must determine the depreciation schedules for the purpose of calculating the depreciation for each regulatory year.[13]

8 NER, cll. 6.4.3(a)(3), 6.4.3(b)(3).
9 NER, cl. 6.5.5(a).
10 NER, cl. 6.5.5(b)(1).
11 NER, cl. 6.5.5(b)(1).
12 NER, cl. 6.5.5(b)(2).
13 NER, cl. 6.5.5(a)(ii).

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

- the opening RAB at 1 January 2016
- the forecast net capex in the 2016–20 regulatory control period
- the forecast inflation rate for that period
- the standard asset life for each asset class—used for calculating the depreciation of new assets associated with forecast net capex in the regulatory control period
- the remaining asset life for each asset class—used for calculating the depreciation of existing assets included in the opening RAB at 1 January 2016.

Our preliminary decision on a service provider's regulatory depreciation allowance reflects our determinations on the forecast capex, forecast inflation and opening RAB at 1 January 2016 (the first three building block components in the above list). Our determinations on these components of the service provider's proposal are discussed in attachments 6, 3 and 2 respectively.

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

- the approved standard asset lives in the distribution determination for the 2011–15 regulatory control period
- the standard asset lives of comparable asset classes approved in our recent distribution determinations for other service providers.

We use our standard approach to depreciating a service provider's existing assets in the PTRM by using the remaining asset lives at the start of a regulatory control period. Our preferred method to establish a remaining asset life for each asset class is the weighted average remaining life method. This method rolls forward the remaining asset life for an asset class from the beginning of the 2011–15 regulatory control period. We consider this method better reflects the mix of assets within an asset class, when they were acquired over that period (or if they were existing assets), and the remaining value of those assets (used as a weight) at the end of the period. In this attachment we assess the outcomes of the average depreciation approach proposed by United Energy against the outcomes of our preferred method.

5.3.1 Interrelationships

The regulatory depreciation allowance 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 (assuming

[14] The PTRM distinguishes between straight-line depreciation and regulatory depreciation, the difference being that regulatory depreciation is the straight-line depreciation minus the indexation adjustment.

no further capex). This outcome reduces the return on capital allowance, although this impact is usually secondary to the increased depreciation allowance.

Ultimately, however, a service provider can only recover the capex that it incurred on assets once. The depreciation allowance reflects how quickly the RAB is being recovered, and it is based on the remaining and standard 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 allowance.

To prevent double counting of inflation through the WACC and the RAB, the regulatory depreciation allowance also has an offsetting reduction for indexation of the RAB.[15] Factors that affect forecast inflation and/or the size of the RAB will affect the size of this indexation adjustment.

Figure 2.1 (in attachment 2) shows the relative size of the inflation and straight-line depreciation and their impact on the RAB. A 10 per cent increase in the straight-line depreciation causes revenues to increase by about 3.5 per cent.

5.4 Reasons for preliminary decision

We accept United Energy's proposed straight-line depreciation method for calculating the regulatory depreciation allowance as set out in the PTRM. We also accept the proposed standard asset lives, with the exception for the 'Equity raising cost' asset class. However, we do not accept the proposed average depreciation method used to calculate the remaining asset lives at 1 January 2016.

Overall, we reduced United Energy's proposed forecast regulatory depreciation allowance by $72.7 million (or 18.7 per cent) to $315.4 million ($ nominal). This amendment also reflects our determinations regarding other components of United Energy's regulatory proposal—for example, the forecast capex (attachment 6), the forecast inflation rate (attachment 3) and the opening RAB as at 1 January 2016 (attachment 2)—that affect the forecast regulatory depreciation allowance.

5.4.1 Standard asset lives

We accept United Energy's proposed standard asset lives for its existing asset classes, with the exception for the 'Equity raising cost' asset class. These asset lives are consistent with the approved standard asset lives for the 2011–16 regulatory control period and comparable with the standard asset lives approved in our recent determinations for other electricity distribution service providers.[16] We are satisfied

[15] If the asset lives are extremely long, such that the straight-line depreciation rate is lower than the inflation rate, then negative regulatory depreciation can emerge. In this case the indexation adjustment is greater than the straight-line depreciation.

[16] AER, *Final decision, Victorian electricity distribution network service providers, Distribution determination 2011–2015*, October 2010, p. 467; AER, *Final decision: Ausgrid distribution determination 2015–16 to 2018–19,*

these proposed standard asset lives reflect the nature of the assets over the economic lives of the asset classes.[17]

We accept United Energy's proposed new asset class of 'SCADA (10-year asset)' and its proposed standard asset life of 10 years.[18] This asset class will contain SCADA, network control and protection capex from 1 January 2016. We are satisfied that most SCADA, network control and protection system assets have an economic life longer than the 5 year standard life (approved at the previous determination for 'SCADA/Network control'), but shorter than the primary distribution system assets. We therefore accept the proposal to include a new 'SCADA (10-year asset)' asset class and rename the previous 'SCADA/Network control' asset class to 'SCADA (5-year asset)'.

We also accept the creation of a new non-depreciating 'Land' asset class (assigned a term of 'n/a' for modelling purposes).[19] This asset class will contain any land related capex incurred from 1 January 2016.

We do not accept United Energy's proposed standard asset life for the 'Equity raising costs' asset class of 35 years. We instead determine a standard asset life of 40.4 years for amortising equity raising costs. This is consistent with the standard asset life approved for the 2011–15 regulatory control period.[20]

We received submissions from the CCP and the Victorian Energy Consumer and User Alliance (VECUA) stating that the standard asset lives for United Energy differed from the actual lives, and from the standard asset lives for equivalent assets used by other distributors.[21] Each submitted that these variations have major implications for depreciation and allowed distributors to choose asset lives that optimise their returns for each revenue reset.

We note that the standard asset lives reported by CCP and VECUA are from disaggregated categories used to model replacement capital expenditure (repex), rather than the higher-level categories used when calculating the regulatory depreciation allowance.[22] Although individual distributors may have higher or lower

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attachment 5, April 2015, p. 10; AER, *Final decision: Endeavour distribution determination 2015–16 to 2018–19, attachment 5,* April 2015, p. 9; and AER, *Final decision: Essential Energy distribution determination 2015–16 to 2018–19, attachment 5,* April 2015, p. 9.

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

18 United Energy, *Regulatory proposal*, October 2014, p. 101.

19 According to the Australian accounting standards, land is generally not depreciable because land values tend to increase over time due to the limited supply of, and the increasing demand for, land (Australian Accounting Standard Board, *Accounting standard AASB1021: Depreciation*, August 1997, pp. 10–11). The Income Tax Assessment Act (ITAA) 1997 excludes land from the definition of a 'depreciating asset' (ITAA 1997, s. 40-30).

20 AER, *Final decision, Victorian electricity distribution network service providers, Distribution determination 2011–2015*, October 2010, p. 467.

21 CCP3, *Response to proposals from Victorian electricity distribution network service providers for a revenue reset for the 2016-2020 regulatory period*, 5 August 2015, pp. 49–51; Victorian Energy Consumer and User Alliance (VECUA), Submission to the AER Victorian Distribution Networks' 2016–20 Revenue Proposals, July 2013, pp. 30–31.

22 The different levels of disaggregation/aggregation are each appropriate for the relevant purpose.

standard asset lives for specific repex asset categories, there is less variation in the standard asset lives of the aggregated categories.[23] The exceptions are the two 'Other assets' categories reported by CPP and VECUA, where the variation reflects different categorisation and reporting of assets across the different distributors. We consider that the standard asset lives approved for United Energy to calculate the regulatory depreciation allowance are comparable to the equivalent categories used in other regulatory determinations.[24]

Table 5.4 sets out our preliminary decision on United Energy's standard asset lives for the 2016–20 regulatory control period.

5.4.2 Remaining asset lives

We do not accept United Energy's proposed average depreciation approach to determining remaining asset lives as at 1 January 2016.[25] We consider that United Energy's proposed approach consistently underestimates the remaining asset lives. We have instead calculated the remaining asset lives using the WARL approach as set out in Table 5.4. We are satisfied the remaining asset lives determined by our approach meet the requirements of the NEL and NER.[26] The impact of our changes to the remaining asset lives is to reduce revenues over the 2016–20 regulatory control period by about $26 million, or 1.1 per cent, compared to United Energy's proposal.

In response to our information request, United Energy stated it had determined remaining asset lives by taking the 31 December 2015 value for a given asset class and dividing it by the annual deprecation for that asset class in 2015.[27] This is a form of average depreciation approach that the AER has raised concerns with in the past. Recently we rejected similar average depreciation approaches as proposed by both SA Power Networks (SAPN) and Ergon Energy in preliminary decisions.[28] The AER in its preliminary decision for Ergon Energy and SAPN considered that an average depreciation approach leads to a shorter depreciation schedule that does not reflect the economic life of the assets. It locks in an inappropriately low remaining asset life for an asset class as it does not account for when existing assets expire.[29]

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23 In general, each distributor has some repex asset classes with below average standard asset lives, and some with above average asset lives. When these repex asset classes are aggregated into the higher level asset classes used in the RFM and PTRM, the two offset each other. Further, we must allow for some variation in standard asset lives even for disaggregated categories reflecting the specific nature of each distributor's network.

24 This includes the April 2015 final determinations for the NSW electricity distributors, as well as the other Victorian distribution determinations made contemporaneously with this preliminary decision.

25 United Energy, *RE: Vic. EDPR - United Energy - IR#014 - 24 July 2015,* 29 July 2015.

26 NEL, s. 16; NER, cl. 6.5.5(b)(1).

27 United Energy, *RE: Vic. EDPR - United Energy - IR#014 - 24 July 2015,* 29 July 2015.

28 See, AER, *Preliminary decision, SA Power Networks determination 2015−16 to 2019−20*, Attachment 5, section 5.4.2, April 2015 and AER, Pr*eliminary decision, Ergon Energy determination 2015−16 to 2019−20, Attachment 5, section 5.4.2*, April 2015.

29 AER, *Preliminary decision, SA Power Networks determination 2015−16 to 2019−20*, Attachment 5, section 5.4.2, April 2015, pp. 5-11 to 5-18; and AER, *Preliminary decision, Ergon Energy determination 2015−16 to 2019−20, Attachment 5, section 5.4.2*, April 2015, pp. 512 to 5-20.

We consider it is important to take a long term view of the approach to assess whether it contributes to the achievement of the NEO.[30] This requires us to consider whether the approach promotes efficient investment in, and efficient operation and use of, electricity services for the long term interests of consumers. An approach that underestimates the remaining life of assets results in customers paying for assets too quickly (such that the asset is fully depreciated before the end of its technical life) and is therefore not in the longer term interests of consumers. Also, this may encourage inefficient use and early replacement of assets inconsistent with the NEL.[31]

Table 5.3 sets out the divergence in remaining asset lives between the WARL and average depreciation approaches is quite significant for certain asset classes used by United Energy.

Table 5.3 Difference in remaining asset lives at 1 January 2016 for key asset classes—WARL versus average depreciation

Asset class	Remaining asset lives under WARL approach (years)	Remaining asset lives under average depreciation approach (years)	Difference in remaining asset lives between average depreciation and WARL approaches (per cent)
Subtransmission	33.6	26.2	–22.2%
Distribution system assets	25.3	24.7	–2.2%
SCADA (5-year asset)	2.3	2.1	–7.6%
Non network - IT	3.6	3.2	–12.0%
Non network - other	5.2	2.5	–52.3%

Source: AER analysis of key asset classes.

The impact of United Energy's average depreciation approach and the WARL can be seen in relation to United Energy's 'Subtransmission' asset class. The 'Subtransmission' asset class has an opening asset value at 1 January 2016 of $539.8 million ($2015). This value includes existing assets at 1 January 2011 of $337.9 million ($2015) and new assets of $201.9 million ($2015) added to the asset class over the 2011–15 regulatory control period.

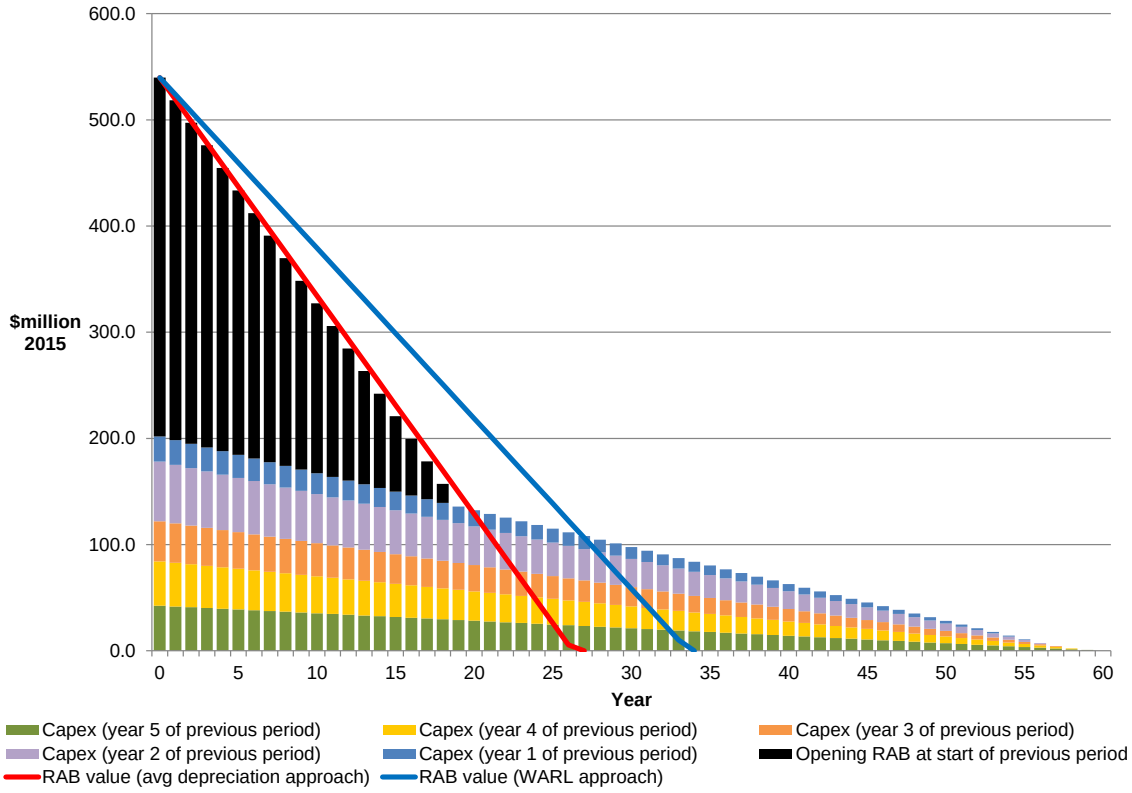
Figure 5.1 shows the impact of United Energy's average depreciation approach (red line) compared to the WARL approach (blue line) and a year-by-year tracking approach (stacked columns, with each bar representing a different year of capex that

[30] NEL, s. 16(1)(a).

[31] NEL, s. 7.

will expire at a different time).[32] This example assumes the asset class incurs no further capex.

Figure 5.1 Projection of the value of assets for 'Subtransmission' asset class over time ($million, 2015)



Source: AER analysis.

Under year-by-year tracking approach the value of subtransmission assets in the RAB as at 1 January 2016 will not be fully depreciated until 60 years into the future. Under United Energy's proposed average depreciation approach these assets would have been fully depreciated in 26 years. Under the AER's preferred WARL approach the assets would be fully depreciated in 34 years. As illustrated in the figure above, the WARL approach leads to under-recovery and over-recovery of depreciation being balanced out through time—over the lives of all assets in the group.[33] The average depreciation approach does not achieve this balancing, as there is no recognition of

[32] In earlier decisions, the AER termed this approach 'individual tracking'. The new label, year-by-year tracking, identifies the key distinguishing feature of this approach. It does not involve tracking the depreciation on individual assets.

[33] Compared to the year-by-year tracking approach, the WARL approach under returns depreciation in some years and over returns depreciation in others. However, the under and over recovery balances out so there is no net difference in the timing of depreciation between the approaches, over the life of the assets.

when older assets expire.[34] It leads to a shorter depreciation schedule that does not reflect the economic life of the assets. Therefore, we do not consider the average depreciation approach to be consistent with the NER.[35]

As is shown in Figure 5.1, all three approaches result in total depreciation equalling (in real terms) the initial value of the assets, and so all three approaches conform with clause 6.5.5(b)(2) of the NER.[36] However, the three approaches differ with regard to the fulfilment of clause 6.5.5(b)(1) of the NER:

- Average depreciation does not meet this requirement, because it brings forward a proportion of the assets' depreciation so that it is received earlier than the underlying economic life of the assets. The resulting depreciation schedules will reflect asset lives that are shorter than the standard asset lives assigned to the assets when capex is incurred.
- Year-by-year tracking meets this requirement, because the depreciation received each year will reflect the underlying economic life of the assets. The resulting depreciation schedules will reflect the standard asset lives assigned to the assets when capex is incurred.
- WARL meets this requirement, because the depreciation received over the life of the assets will reflect the underlying economic life of the assets. Like the average depreciation approach, there will be some years where depreciation is received earlier than the underlying economic life of the assets. However, there will also be some years where depreciation is received later than the underlying economic life of the assets. These two effects will exactly offset each other. In aggregate, across the life of the assets, the resulting depreciation schedules will reflect the standard asset lives assigned to the assets when capex is incurred.

Since we consider that the depreciation schedules proposed by United Energy (based on average depreciation) do not conform with the NER, we are able to apply an alternative approach that does meet the legislative requirements.[37] Of the available approaches we prefer the WARL, because it:

- meets the requirements of the NER, in that it produces depreciation schedules that align with the economic life of the assets
- avoids the additional complexity inherent in year-by-year tracking, which brings with it additional administration costs and increased risk of error
- reduces the variability in depreciation schedules that may arise under year-by-year tracking.

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[34] Compared to year-by-year tracking or WARL, the average deprecation approach over returns depreciation in some (or all) years but never under returns depreciation. Hence, over the life of the assets, there is a net difference in the timing of depreciation between the approaches. The average depreciation approach provides earlier depreciation than either of the other two approaches, as is evident in Figure 5.1.

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

[36] Graphically, this means the blue line, red line and stacked columns all drop to zero (and do not drop below zero).

[37] NER, cl. 6.5.5(a)(2).

At the time of this preliminary decision, the roll forward of United Energy's RAB includes estimated capex values for 2015. We expect to update the 2015 estimated capex values for the final decision. Those capex values are used to calculate remaining asset lives under the WARL approach. Therefore, for the final decision, we will recalculate United Energy's remaining asset lives at 1 January 2016 using the method approved in this preliminary decision.

Table 5.4 sets out our preliminary decision on United Energy's remaining asset lives for the 2016–20 regulatory control period.

Table 5.4 AER's preliminary decision on United Energy's standard and remaining asset lives at 1 January 2016 (years)

Asset class	Standard asset life	Remaining asset life as at 1 January 2016
Subtransmission	60.0	33.6
Distribution system assets	35.6	25.3
Metering	n/a	1.0
Public lighting	n/a	1.8
SCADA (5-year asset)	5.0	2.3
Non network - IT	5.0	3.6
Non network - other	7.5	5.2
Neutral screen services[a]	n/a	1.0
Distribution transformers upgrades[a]	n/a	1.0
SCADA (10-year asset)	10.0	n/a
Land	n/a	n/a
Equity raising costs	40.4	36.4

Source: AER analysis.

n/a: not applicable.

(a): Under the weighted average method, the remaining asset life is calculated as 'n/a'. However, the RAB roll forward produces a residual value at 31 December 2015, and so assigning a remaining asset life of 1 year to fully depreciate (by way of writing off) the residual value is appropriate in this case. Applying 'n/a' means the residual value remains in the RAB and does not depreciate.