

# Draft Decision

Essential Energy

Electricity Distribution

Determination 2024 to 2029

(1 July 2024 to 30 June 2029)

Attachment 2

Regulatory asset base

September 2023

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#### **Amendment record**

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## 2 Regulatory asset base

The regulatory asset base (RAB) is the value of the assets used by Essential Energy (Essential) to provide standard control services.<sup>1</sup> Our distribution determination specifies the RAB as at the commencement of the regulatory control period and the appropriate method for the indexation of the RAB.<sup>2</sup> The indexation of the RAB is one of the building blocks that form the annual revenue requirement for each year of the 2024–29 regulatory control period.<sup>3</sup> We set the RAB as the foundation for determining a distributor's revenue requirements and use the opening RAB for each regulatory year to determine the return on capital and return of capital (regulatory depreciation) building blocks.<sup>4</sup>

This attachment presents our draft decision on the opening RAB value as at 1 July 2024 for Essential and our forecast of its RAB values over the 2024–29 period. It also presents our draft decision for establishing the RAB as at the commencement of the 2029–34 period using depreciation that is based on forecast capital expenditure (capex).<sup>5</sup>

### 2.1 Draft decision

We determine an opening RAB value of \$10,265.2 million (\$ nominal) as at 1 July 2024 for Essential. This value is \$10.3 million (0.1%) lower than Essential's proposed opening RAB of \$10,275.5 million (\$ nominal) as at 1 July 2024.<sup>6</sup> This decrease is largely due to the updates we made to the consumer price index (CPI) inputs for 2022–23 and 2023–24 in the roll forward model (RFM) to reflect more up-to-date values:

- We have updated the actual CPI for 2022–23 to 7.83%, reflecting the 2022 December quarter CPI published by the Australian Bureau of Statistics (ABS), which became available after Essential submitted its proposal. This compares to Essential's proposed estimated CPI of 7.75%.
- We have also updated the estimated CPI for 2023–24 with the latest Reserve Bank of Australia (RBA) forecast published in its Statement on Monetary Policy to reflect the latest economic conditions.<sup>7</sup> For our draft decision, we adopt an estimated CPI value of 4.10% for 2023–24, compared to Essential's proposed 4.25%.<sup>8</sup> The CPI input for 2023–24 will be updated again to reflect the actual CPI published by the ABS for our final decision.

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<sup>1</sup> NER, cl. 6.5.1(a).

<sup>2</sup> NER, cl. 6.3.2(a)(1) and (2).

<sup>3</sup> NER, cll. 6.4.3(a)(1) and (b)(1).

<sup>4</sup> NER, cll. 6.4.3(a)(2) and (3).

<sup>5</sup> NER, cl. 6.12.1(18).

<sup>6</sup> Essential Energy, *5.02 Standard Control Roll Forward Model*, January 2023.

<sup>7</sup> RBA, *Statement on Monetary Policy, Appendix: Forecasts*, August 2023.

<sup>8</sup> RBA, *Statement on Monetary Policy, Economic Outlook Table 5.1*, November 2022.

As the RAB must be maintained in real dollar terms by indexing for inflation,<sup>9</sup> the combined effect of our above amendments to CPI results in an opening RAB value as at 1 July 2024 that is \$7.5 million (less than 0.1%) lower than Essential’s proposal, all else being equal.

We accept Essential’s proposed method for calculating the opening RAB. However, we have made the following updates in the proposed inputs to the RFM (in addition to the CPI updates discussed above):

- the nominal vanilla weighted average cost of capital (WACC) for 2023–24, equity raising costs and the forecast straight-line depreciation inputs. These updates are required to reflect the 2023–24 return on debt update in the post-tax revenue model (PTRM) for the 2019–24 period, which became available after Essential submitted its proposal
- the nominal vanilla WACC for 2021–22 to be consistent with the value in our final decision PTRM following the 2021–22 return on debt update
- the average remaining life for the asset class of ‘Other non-system assets’ from a rounded 8.43 years to an unrounded number to be consistent with the average remaining life in the approved PTRM for the 2019–24 period
- the actual as-incurred capital contribution amounts in 2020–21 for the ‘Sub-transmission lines and cables’ and ‘Substations’ asset classes to align with those in the 2020–21 annual regulatory information notices (RIN)
- the actual as-incurred capex amounts in 2022–23 and 2023–24 for the ‘Buildings’ asset class are net of insurance proceeds for the Lismore depot (see attachment 5 for more details).

The net impact of these updates is a further reduction of \$2.8 million to the opening RAB value.

To determine the opening RAB as at 1 July 2024, we have rolled forward the RAB over the 2019–24 period to determine a closing RAB value at 30 June 2024 in accordance with our RFM.<sup>10</sup> This roll forward process includes an adjustment at the end of the 2019–24 period to account for the difference between actual 2018–19 capex and the estimate approved in the 2019–24 determination.<sup>11</sup>

Table 2.1 sets out our draft decision on the roll forward of Essential’s RAB over the 2019–24 period.

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<sup>9</sup> NER, cl 6.4.3(b)(1) and 6.5.1(e)(3).

<sup>10</sup> AER, *Electricity distribution network service providers: Roll forward model (version 3.1)*, May 2022.

<sup>11</sup> The end of period adjustment will be positive (negative) if actual capex is higher (lower) than the estimate approved at the 2019–24 determination.

**Table 2.1 AER's draft decision on Essential's RAB for the 2019–24 period (\$million, nominal)**

	2019–20	2020–21	2021–22	2022–23 <sup>a</sup>	2023–24 <sup>b</sup>
Opening RAB	8,105.0	8,449.7	8,610.0	9,004.3	9,821.2
Capital expenditure <sup>c</sup>	480.3	412.4	444.2	500.8	512.7
Indexation on opening RAB <sup>d</sup>	149.2	72.7	301.2	705.2	402.7
Less: straight-line depreciation <sup>e</sup>	284.7	324.9	351.1	389.1	417.5
Interim closing RAB	8,449.7	8,610.0	9,004.3	9,821.2	10,319.1
Difference between estimated and actual capex in 2018–19					–39.2
Return on difference for 2018–19 capex					–14.7
<b>Closing RAB as at 30 June 2024</b>					<b>10,265.2</b>

Source: AER analysis.

- (a) Based on estimated capex provided by Essential. We will update the RAB roll forward with actual capex in the final decision.
- (b) Based on estimated capex provided by Essential. We expect to update the RAB roll forward with a revised capex estimate in the final decision, and true-up the RAB for actual capex at the next distribution determination.
- (c) Net of disposals and capital contributions, and adjusted for actual CPI and half-year WACC.
- (d) We will update the RAB roll forward for actual CPI for 2023–24 in the final decision.
- (e) Adjusted for actual CPI. Based on forecast capex.

We determine a forecast closing RAB value as at 30 June 2029 of \$12,602.5 million (\$ nominal) for Essential. This is \$185.9 million higher than Essential's proposed closing RAB value of \$12,416.6 million (\$ nominal).<sup>12</sup> This increase is mainly due to our draft decision on the expected inflation rate (Attachment 3). Our draft decisions on the opening RAB as at 1 July 2024 (discussed in this attachment), forecast depreciation (Attachment 4) and forecast capex (Attachment 5) also affect the forecast closing RAB value as at 30 June 2029.<sup>13</sup>

Table 2.2 sets out our draft decision on the forecast RAB values for Essential over the 2024–29 period.

<sup>12</sup> Essential Energy, *5.02 Standard Control Roll Forward Model*, January 2023.

<sup>13</sup> Capex enters the RAB net of forecast disposals and capital contributions. It includes equity raising costs (where relevant) and the half-year WACC to account for the timing assumptions in the PTRM. Therefore, our draft decision on the forecast RAB also reflects our amendments to the rate of return for the 2024–29 period (Attachment 3).

**Table 2.2 AER's draft decision on Essential's RAB for the 2024–29 period (\$million, nominal)**

	2024–25	2025–26	2026–27	2027–28	2028–29
Opening RAB	10,265.2	10,733.7	11,189.9	11,654.4	12,120.1
Capital expenditure <sup>a</sup>	557.3	565.9	586.1	596.2	625.9
Indexation on opening RAB	287.4	300.5	313.3	326.3	339.3
Less: straight-line depreciation	376.2	410.3	434.8	456.8	482.9
<b>Closing RAB</b>	<b>10,733.7</b>	<b>11,189.9</b>	<b>11,654.4</b>	<b>12,120.1</b>	<b>12,602.5</b>

Source: AER analysis.

(a) Net of forecast disposals and capital contributions. In accordance with the timing assumptions of the PTRM, the capex includes a half-year WACC allowance to compensate for the six month period before capex is added to the RAB for revenue modelling.

We accept Essential's proposal that the forecast depreciation approach is to be used to establish the opening RAB at the commencement of the 2029–34 period.<sup>14</sup> We consider this approach is consistent with the capital expenditure incentive objective in that it will provide sufficient incentives for Essential to achieve capex efficiency gains over the 2024–29 period. This approach is also consistent with our *Framework and approach* (F&A) paper.<sup>15</sup>

## 2.2 Essential's proposal

Essential used our RFM to establish an opening RAB as at 1 July 2024 and our PTRM to roll forward the RAB over the 2024–29 period.

Essential proposed an opening RAB value as at 1 July 2019 of \$8,105.0 million (\$ nominal). Rolling forward this RAB with actual/estimated capex and using depreciation based on forecast capex approved for the 2019–24 period, Essential proposed a closing RAB value of \$10,275.5 million (\$ nominal) as at 30 June 2024.

Table 2.3 Essential proposed a forecast closing RAB as at 30 June 2029 of \$12,416.6 million (\$ nominal). This value reflects its proposed opening RAB, forecast capex, expected inflation, and depreciation (based on forecast capex) over the 2024–29 period. Its projected RAB over the 2024–29 period is shown in Table 2.4.

Essential proposed to apply a forecast depreciation approach to establish the RAB at the commencement of the 2029–34 period, consistent with the approach set out in our F&A.

Table 2.3 sets out Essential's proposed roll forward of its RAB during the 2019–24 period.<sup>16</sup>

Essential proposed a forecast closing RAB as at 30 June 2029 of \$12,416.6 million (\$ nominal). This value reflects its proposed opening RAB, forecast capex, expected inflation,

<sup>14</sup> NER, cl. 6.12.1(18).

<sup>15</sup> AER, *Framework and approach: Ausgrid, Essential Energy and Essential Energy (New South Wales), Regulatory control period commencing 1 July 2024*, July 2022, p. 53.

<sup>16</sup> Essential Energy, *5.02 Standard Control Roll Forward Model*, January 2023.

and depreciation (based on forecast capex) over the 2024–29 period. Its projected RAB over the 2024–29 period is shown in Table 2.4.

Essential proposed to apply a forecast depreciation approach to establish the RAB at the commencement of the 2029–34 period, consistent with the approach set out in our F&A.<sup>17</sup>

**Table 2.3 Essential’s proposed RAB for the 2019–24 period (\$million, nominal)**

	2019–20	2020–21	2021–22	2022–23 <sup>a</sup>	2023–24 <sup>a</sup>
Opening RAB	8,105.0	8,449.7	8,610.0	9,004.3	9,815.3
Capital expenditure <sup>b</sup>	480.2	412.4	444.2	502.0	513.9
Indexation on opening RAB	149.2	72.7	301.2	697.8	417.1
Less: straight-line depreciation <sup>c</sup>	284.7	324.9	351.1	388.9	416.9
Interim closing RAB	8,449.7	8,610.0	9,004.3	9,815.3	10,329.5
Difference between estimated and actual capex in 2018–19					–39.2
Return on difference for 2018–19 capex					–14.8
<b>Closing RAB as at 30 June 2024</b>					<b>10,275.5</b>

Source: Essential Energy, *5.02 Standard Control Roll Forward Model*, January 2023.

(a) Based on estimated capex.

(b) Net of disposals and capital contributions, and adjusted for actual CPI and half-year WACC.

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

**Table 2.4 Essential’s proposed RAB for the 2024–29 period (\$million, nominal)**

	2024–25	2025–26	2026–27	2027–28	2028–29
Opening RAB	10,275.5	10,712.9	11,134.2	11,559.7	11,982.2
Capital expenditure <sup>a</sup>	556.0	562.9	581.1	589.4	616.7
Indexation on opening RAB	256.9	267.8	278.4	289.0	299.6
Less: straight-line depreciation	375.5	409.5	433.9	455.9	481.9
<b>Closing RAB</b>	<b>10,712.9</b>	<b>11,134.2</b>	<b>11,559.7</b>	<b>11,982.2</b>	<b>12,416.6</b>

Source: Essential Energy, *5.02 Standard Control Roll Forward Model*, January 2023.

(a) Net of forecast disposals and capital contributions. Inclusive of half-year WACC to account for the timing assumptions in the PTRM.

## 2.3 Assessment approach

We roll forward Essential’s RAB over the 2019–24 period to arrive at an opening RAB value at 1 July 2024. This value must be adjusted for any differences in estimated and actual

<sup>17</sup> Essential Energy, *5.01 our revenue requirement components*, January 2023, p. 4.



capex.<sup>18</sup> It may also be adjusted to reflect any changes in the use of the assets, with only assets used to provide standard control services to be included in the RAB.<sup>19</sup>

To determine the opening RAB at 1 July 2024, we developed an asset base RFM that a distributor must use in preparing its regulatory proposal.<sup>20</sup> We used the RFM to roll forward Essential’s RAB from the beginning of the final year of the 2014–19 period,<sup>21</sup> through the 2019–24 period, to the beginning of the 2024–29 period.

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

- adding actual inflation (indexation) adjustment to the opening RAB for the relevant year. This adjustment is consistent with the inflation factor used in the control mechanism<sup>22</sup>
- adding actual or estimated capex to the RAB for the relevant year.<sup>23</sup> We review a distributor’s past capex and may exclude past capex from being rolled into the RAB where total capex exceeds the regulatory allowance.<sup>24</sup> The details of our assessment approach for capex overspending are set out in the Capital expenditure incentive guideline.<sup>25</sup> We note that our review of past capex does not include the last two years of the 2019–24 period—these will instead be reviewed at the next distribution determination.<sup>26</sup> We check actual capex amounts against audited annual reporting regulatory information notice (RIN) data and generally accept the capex reported in those RINs in rolling forward the RAB.<sup>27</sup> However, there may be instances where adjustments are required to the annual reporting RIN data<sup>28</sup>
- subtracting depreciation from the RAB for the relevant year, calculated in accordance with the distribution determination for Essential’s 2019–24 period.<sup>29</sup> Depreciation based on forecast or actual capex can be used to roll forward the RAB.<sup>30</sup> For this draft decision, we use depreciation based on forecast capex for rolling forward Essential’s RAB over

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<sup>18</sup> NER, cl. S6.2.1(e)(3).

<sup>19</sup> NER, cl. S6.2.1(e)(7).

<sup>20</sup> NER, cll. 6.5.1(b), 6.5.1(e), S6.1.3(7); AER, *Electricity distribution network service providers: Roll forward model version 3.1*, May 2022.

<sup>21</sup> NER, cl. S6.2.1(e)(3).

<sup>22</sup> NER, cl. 6.5.1(e)(3).

<sup>23</sup> NER, cl. S6.2.1(e)(4).

<sup>24</sup> NER, cl. S6.2.2A. Under the NER, cl. S6.2.2A(b), the exclusion of inefficient capex could only come from three areas: overspend in capex, margin paid to third party and capitalisation of opex as defined in cll. S6.2.2A (c), (d) and (e) of the NER.

<sup>25</sup> AER, *Capital expenditure incentive guideline for electricity network service providers*, April 2023, pp. 13–21.

<sup>26</sup> NER, cl. S6.2.2A(a1). The two year lag ensures that actual capex (instead of estimated capex) is available when the review of past capex commences.

<sup>27</sup> We will update any estimated capex with actual capex at the time of the next distribution determination.

<sup>28</sup> For example, we make adjustment for movements in capitalised provisions if the actual capex amounts reported in the RIN include capitalised provisions.

<sup>29</sup> NER, cl. S6.2.1(e)(5).

<sup>30</sup> NER, cl. 6.12.1(18).

the 2019–24 period.<sup>31</sup> Depreciation based on forecast capex will also be used for the 2024–29 period RAB roll forward at the next distribution determination<sup>32</sup>

- subtracting any gross proceeds for asset disposals for the relevant year from capex to be added to the RAB.<sup>33</sup> We check these amounts against audited annual reporting RIN data.

These annual adjustments give the closing RAB for any particular year, which then becomes the opening RAB for the following year. Through this process the RFM rolls forward the RAB to the end of the 2019–24 period. The PTRM, which is used to calculate the annual revenue requirement for the 2024–29 period, generally adopts the same RAB roll forward approach as the RFM. However, in the PTRM, the annual adjustments to the RAB are based on forecasts, rather than actual amounts.<sup>34</sup>

The opening RAB for the 2029–34 period can be determined using depreciation based either on forecast or actual capex incurred during the 2024–29 period.<sup>35</sup> To roll forward the RAB using depreciation based on forecast capex, we would use the forecast depreciation contained in the PTRM for the 2024–29 period, adjusted for actual inflation. If the approach to roll forward the RAB using depreciation based on actual capex was adopted, we would recalculate the depreciation based on actual capex incurred during the 2024–29 period.

Our decision on whether to use actual or forecast depreciation must be consistent with the capex incentive objective.<sup>36</sup> This objective is to ensure that increases to the RAB through capex only occur where that capex reasonably reflects the capex criteria.<sup>37</sup> In deciding between actual and forecast depreciation, we have regard to:<sup>38</sup>

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

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<sup>31</sup> The use of forecast depreciation is consistent with the depreciation approach established in the 2019–24 distribution determination for Essential. See AER, *Final decision, Essential distribution determination 2019–2024, Attachment 2, Regulatory asset base*, April 2019, p. 9.

<sup>32</sup> Refer to section 2.4.3 for the reasons.

<sup>33</sup> NER, cl. S6.2.1(e)(6).

<sup>34</sup> NER, cl. S6.2.3.

<sup>35</sup> NER, cl. S6.2.2B.

<sup>36</sup> AER, *Framework and approach: Ausgrid, Essential Energy and Essential Energy (New South Wales), Regulatory control period commencing 1 July 2024*, July 2022, p. 53.

<sup>37</sup> NER, cl. 6.4A(a).

<sup>38</sup> NER, cl. S6.2.2B(b) and (c).

### 2.3.1 Interrelationships

The RAB is an input into the determination of the return on capital and depreciation (return of capital) building block amounts.<sup>39</sup> Factors that influence the RAB will therefore flow through to these building block components and the annual revenue requirement. Other things being equal, a higher RAB increases both the return on capital and depreciation amounts.

The RAB is determined by various factors, including:

- the opening RAB (meaning the value of existing assets at the beginning of the regulatory control period)
- net capex<sup>40</sup>
- depreciation
- indexation adjustment – so the RAB is presented in nominal terms, consistent with the rate of return.

The opening RAB at the start of a regulatory control period depends on the value of existing assets and will depend on actual net capex, actual inflation outcomes and depreciation in the past.

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

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

We maintain the RAB in real terms by indexing for inflation.<sup>41</sup> A nominal rate of return (WACC) is multiplied by the opening RAB to produce the return on capital building block.<sup>42</sup> To prevent the double counting of inflation through the nominal WACC and indexed RAB,<sup>43</sup> the regulatory depreciation building block has an offsetting reduction for indexation of the

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<sup>39</sup> The size of the RAB also impacts the benchmark debt raising cost allowance. However, this amount is usually relatively small and therefore not a significant determinant of revenues overall.

<sup>40</sup> Net capex is gross capex less disposals and capital contributions. The rate of return or WACC also influences the size of the capex. This is because the capex is not depreciated in the year it is first incurred, but added to the RAB at the end of the year. Instead, the capex amount is escalated by half-year WACC to arrive at an end of year value. It then begins depreciating the following year.

<sup>41</sup> NER, cl. 6.3.2(a)(2), 6.5.1(e)(3).

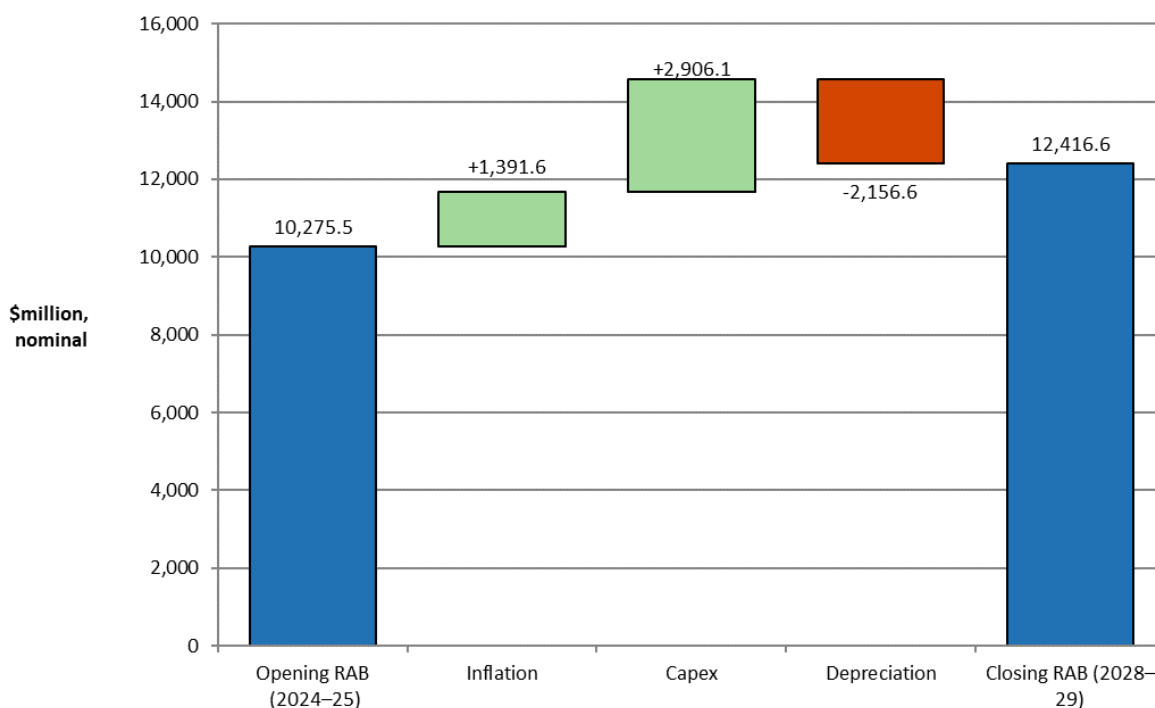
<sup>42</sup> NER, cl. 6.5.2; AER, *Rate of return instrument*, cl. 1, 3, 36(c), February 2023..

<sup>43</sup> NER, cl. 6.4.3(b)(1)(ii).

RAB.<sup>44</sup> 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. If the RAB was un-indexed, there would be no need for an offsetting adjustment to the depreciation calculation of total revenue. This alternative approach provides for overall revenues being higher early in the asset's life (as a result of more depreciation being returned to the distributor) and lower in the future—producing a steeper downward sloping profile of total revenue.<sup>45</sup> The implications of an un-indexed RAB are discussed further in Attachment 4.

Figure 2.1 shows the key drivers of the changes in the RAB over the 2024–29 period as proposed by Essential. Overall, the closing RAB at the end of the 2024–29 period would be 21% higher than the opening RAB at the start of that period based on the proposal, in nominal terms. The proposed forecast net capex increases the RAB by about 28%. Expected inflation increases it by about 14%. On the other hand, forecast depreciation reduces the RAB by about 21%.

**Figure 2.1 Key drivers of changes in the RAB proposed by Essential (\$million, nominal)**



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

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

<sup>44</sup> If the asset lives are extremely long, such that the RAB depreciation rate is lower than the inflation rate, then negative regulatory depreciation can emerge. The indexation adjustment is greater than the RAB depreciation in such circumstances. Please also refer to section 4.3.1 of Attachment 4 of this draft decision for further explanation of the offsetting adjustment to the depreciation.

<sup>45</sup> 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 NPV neutrality.

Essential's proposed forecast straight-line depreciation for the 2024–29 period is \$2,156.6 million (\$ nominal). We have accepted most aspects of Essential's depreciation proposal, subject to some input updates in its depreciation tracking module, as it satisfies the requirements of the National Electricity Rules (NER) in terms of assigned asset lives.<sup>46</sup> However, following our targeted review of Essential's proposed new asset class of 'Distributed energy resources (DER)', we decided to disaggregate it into four separate asset classes and standard lives. We also decided to introduce a new asset class for 'Composite poles' and assigned a standard asset life after our review of Essential's proposed capex for poles. They are discussed in Attachment 4. The depreciation amount largely depends on the opening RAB, which in turn depends on capex in the past.<sup>47</sup> Depreciation associated with forecast capex is a relatively smaller amount.

Forecast net capex is a significant driver of the increase in the RAB. For this draft decision, we are satisfied that Essential's proposed total forecast capex for the 2024–29 period reasonably reflects the capex criteria. We have therefore accepted Essential's forecast capex proposal. Our review of Essential's forecast capex is set out in Attachment 5 of this draft decision.

A 10% increase in the opening RAB at 1 July 2024 causes revenues to increase by around 6%. However, the impact on revenues of the annual change in RAB depends on the source of the RAB change, as some drivers affect more than one building block cost.<sup>48</sup>

## 2.4 Reasons for draft decision

We determine an opening RAB value of \$10,265.2 million (\$ nominal) as at 1 July 2024 for Essential, a reduction of \$10.3 million (0.1%) from the proposed value. We forecast a closing RAB value of \$12,602.5 million by 30 June 2029. This represents an increase of \$185.9 million (1.5%) compared with Essential's proposal. The reasons for our decision are discussed below.

### 2.4.1 Opening RAB as at 1 July 2024

We determine an opening RAB value of \$10,265.2 million as at 1 July 2024 for Essential. This value is \$10.3 million (0.1%) lower than Essential's proposed opening RAB of \$10,275.5 million (\$ nominal) as at 1 July 2024.<sup>49</sup> This decrease is mainly driven by updates to the CPI inputs for 2022–23 and 2023–24.

Figure 2.2 shows the key drivers of the change in Essential's RAB over the 2019–24 period for this draft decision. Overall, the closing RAB value at the end of the 2019–24 period is

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<sup>46</sup> NER, cl. 6.5.5(b).

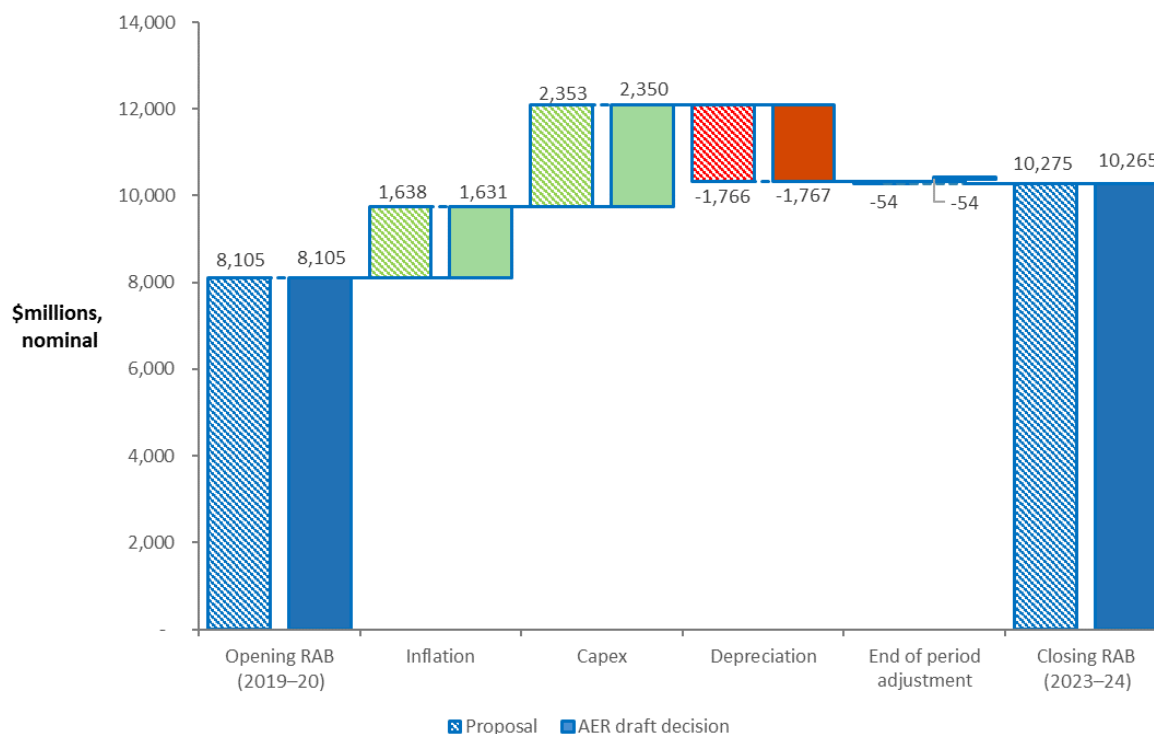
<sup>47</sup> At the time of this draft decision, the roll forward of Essential's RAB includes estimated capex values for 2022–23 and 2023–24. We expect to update the 2022–23 estimated capex with actuals in the final decision. We may also update the 2023–24 estimated capex with a revised estimate in the final decision.

<sup>48</sup> If capex causes the RAB increase, return on capital, depreciation, and debt raising costs all increase too. If a reduction in depreciation causes the RAB increase, revenue could increase or decrease. In this case, the higher return on capital is offset (perhaps more than offset) by the reduction in depreciation allowance. Inflation naturally increases the RAB in nominal terms.

<sup>49</sup> Essential Energy, *5.02 Standard Control Roll Forward Model*, January 2023.

forecast to be 27% higher than the opening RAB at the start of that period, in nominal terms. The new net capex increases the RAB by 29%, while inflation indexation increases it by 20%. Depreciation, on the other hand, reduces the RAB by 22%. End of period adjustments also reduce the RAB by less than 0%.

**Figure 2.2 Key drivers of changes in the RAB over the 2019–24 period – Essential’s proposal compared with the AER’s draft decision (\$million, nominal)**



Source: AER analysis.

Note: Capex is net of disposals and capital contributions. It is inclusive of the half-year WACC to account for the timing assumptions in the RFM.

In the following sections we discuss our assessment of Essential’s proposed inputs in the RFM and the ex post review of 2017–22 capex for RAB roll forward purposes.

#### 2.4.1.1 Key inputs in the RFM

To determine the opening RAB for Essential as at 1 July 2024, we have rolled forward the RAB over the 2019–24 period to determine a closing RAB value as at 30 June 2024. In doing so, we reviewed the key inputs of Essential’s proposed RFM, such as actual inflation, rate of return, gross capex values, asset disposal values, capital contribution values, forecast depreciation and asset lives. We found these inputs were generally correct and reconcile with relevant data sources such as ABS data, annual reporting RINs and the 2019–24 decision models.<sup>50</sup> However, we consider that some of Essential’s proposed RFM inputs require updating with newly available data or corrections.

<sup>50</sup> At the time of this draft decision, the roll forward of Essential’s RAB includes estimated capex values for 2022–23 and 2023–24. We expect to update the 2022–23 estimated capex with actuals in the final decision. We may also update the 2023–24 estimated capex with a revised estimate in the final decision.

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

- Essential’s estimate of 2022–23 inflation of 7.75% with actual CPI of 7.83% published by the ABS, which became available after Essential submitted its proposal. We also updated the estimated CPI for 2023–24 to better reflect the latest economic conditions. Essential’s proposal used 4.25% as the estimated CPI input for 2023–24. For this draft decision, we have updated this value to 4.10%, reflecting the RBA’s forecast published in August 2023.<sup>51</sup>
- the nominal vanilla WACC for 2023–24, equity raising costs and forecast straight-line depreciation amounts. 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 Essential submitted its proposal.
- the nominal vanilla WACC for 2021–22 to be consistent with the value in our final decision PTRM following the 2021–22 return on debt update
- the average remaining life for the asset class of ‘Other non-system assets’ from a rounded 8.43 years to an unrounded number to be consistent with the average remaining life in the approved PTRM for the 2019–24 period
- the actual as-incurred capital contribution amounts in 2020–21 for the ‘Sub-transmission lines and cables’ and ‘Substations’ asset classes to align with those in the 2020–21 annual RIN
- the actual as-incurred capex amounts in 2022–23 and 2023–24 for the ‘Buildings’ asset class are net of insurance proceeds for the Lismore depot (see Attachment 5 for more details).

These updates have resulted in a reduction of \$10.3 million to the opening RAB value as at 1 July 2024.

#### 2.4.1.2 Ex post review of 2017–22 capex

We also consider the extent to which our roll forward of the RAB to 1 July 2024 contributes to the achievement of the capital expenditure incentive objective.<sup>52</sup> In the 2019–24 distribution determination, we noted that the 2017–18 and 2018–19 capex would form part of the review period for whether past capex should be excluded for inefficiency reasons in this distribution determination.<sup>53</sup> The capex for 2019–22 also forms part of the review period.

Consistent with the requirements of the NER we have excluded the last two years of the 2019–24 period from the review of past capex for this distribution determination.<sup>54</sup> This approach ensures that actual capex (instead of estimated capex) is available when the review of past capex commences.

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<sup>51</sup> RBA, *Statement on Monetary Policy, Appendix: Forecasts*, August 2023.

<sup>52</sup> NER, cl. 6.12.2(b).

<sup>53</sup> AER, *Final decision, Essential Energy distribution determination 2019–24, Attachment 2 Regulatory asset base*, April 2019, p. 6.

<sup>54</sup> NER, cl. S6.2.2.A(a1).

Essential's total actual capex incurred from 2017–18 to 2021–22 is below the forecast allowance set at the previous relevant distribution determinations. Therefore, the overspending requirement for an efficiency review of past capex is not satisfied.<sup>55</sup> For the reasons discussed in Attachment 5, we consider the capex incurred in those years is consistent with the capital expenditure criteria and can therefore be included in the RAB.<sup>56</sup>

Further, for the purposes of this draft decision, we have included estimated capex for 2022–23 and 2023–24 in the RAB roll forward to 1 July 2024. At the next distribution determination, the 2022–23 and 2023–24 capex will form part of the review period for whether past capex should be excluded for inefficiency reasons.<sup>57</sup> Our RAB roll forward applies the incentive framework approved in the previous distribution determination, which included the use of a forecast depreciation approach in combination with the application of the capital expenditure sharing scheme (CESS).<sup>58</sup> As such, we consider that the 2019–24 RAB roll forward contributes to an opening RAB (as at 1 July 2024) that includes capex that reflects prudent and efficient costs, in accordance with the capital expenditure criteria.<sup>59</sup>

## 2.4.2 Forecast closing RAB as at 30 June 2029

We forecast a closing RAB value of \$12,602.5 million (\$ nominal) by 30 June 2029 for Essential, which represents an increase of \$185.9 million (1.5%) compared to Essential's proposed amount of \$12,416.6 million (\$ nominal). The increase reflects our draft decision on the inputs for determining the forecast RAB in the PTRM.

The change in the size of the RAB over the 2024–29 period depends on our assessment of its various components including expected inflation (Attachment 3), forecast depreciation (Attachment 4) and forecast capex (Attachment 5). Inflation and capex increase the RAB, while depreciation and disposals reduce it.

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

- We reduced Essential's proposed opening RAB value as at 1 July 2024 by \$10.3 million (\$ nominal) or 0.1% (section 2.4.1).
- We updated Essential's proposed expected inflation rate of 2.50% per annum to 2.80% per annum over the 2024–29 period (Attachment 3). Compared to the proposal, our draft decision results in an increase to the indexation of the RAB component for the 2024–29 period by \$175.2 million (\$ nominal) or 12.6%.<sup>60</sup>

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<sup>55</sup> NER, cl. S6.2.2A(c).

<sup>56</sup> Please see Attachment 5 of this draft decision.

<sup>57</sup> Here, 'inefficiency' of past capex refers to three specific assessments (labelled the overspending, margin and capitalisation requirements) detailed in NER, cl. S6.2.2A. The details of our ex-post assessment approach for capex are set out in AER, *Capital expenditure incentive guideline*, November 2023, pp. 13–21.

<sup>58</sup> AER, *Final decision, Essential Energy Distribution Determination, Attachment 2 – Regulatory asset base*, April 2019, pp. 9–10.

<sup>59</sup> NER, cll. 6.4A(a), 6.5.7(a), 6.5.7(c) and 6.12.2(b).

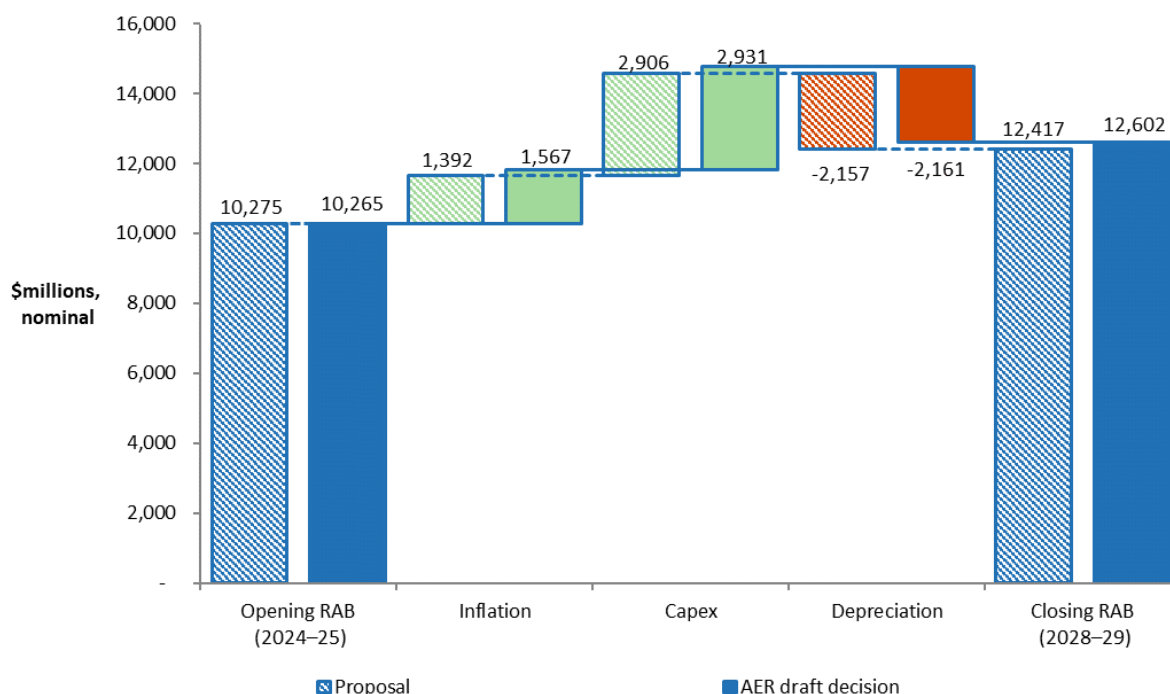
<sup>60</sup> The increase in the indexation of the RAB is largely due to the higher expected inflation rate used in our draft decision.



- We increased Essential’s proposed forecast straight-line depreciation for the 2024–29 period by \$4.4 million (\$ nominal) or 0.2% (Attachment 4).
- While we have accepted Essential’s proposed total forecast capex in real 2023–24 dollar terms (Attachment 5), the forecast capex (\$ nominal) has increased by \$25.4 million or 0.9%. This is due to updates to expected inflation and WACC values.<sup>61</sup>

Figure 2.3 shows the key drivers of the change in Essential’s RAB over the 2024–29 period for this draft decision. Overall, the closing RAB value at the end of the 2024–29 period is forecast to be 23% higher than the opening RAB at the start of that period, in nominal terms. The approved forecast net capex increases the RAB by 29%, while expected inflation increases it by 15%. Forecast depreciation, on the other hand, reduces the RAB by 21%.

**Figure 2.3 Key drivers of changes in the RAB over the 2024–29 period – Essential’s proposal compared with the AER’s draft decision (\$million, nominal)**



Source: AER analysis.

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

### 2.4.3 Application of depreciation approach in RAB roll forward for next distribution determination

We determine that the depreciation approach to be applied to establish Essential’s opening RAB at the commencement of the 2029–34 period will be based on the depreciation schedules (straight-line) using forecast capex at the asset class level approved for the 2024–

<sup>61</sup> Capex is net of forecast disposals and customer contributions, and inclusive of half-year WACC adjustment.

29 period. We consider this approach will provide sufficient incentives for Essential to achieve capex efficiency gains over the 2024–29 period.<sup>62</sup>

Essential proposed to use the forecast depreciation approach to roll forward its RAB for the commencement of the 2029–34 period.<sup>63</sup> We note that this approach is consistent with our F&A.<sup>64</sup>

We have used forecast depreciation for this draft decision when rolling forward the opening RAB at the commencement of the 2024–29 period (section 2.4.1). The use of forecast depreciation to establish the opening RAB for the commencement of the 2029–34 period at the next distribution determination therefore maintains the current approach.

As discussed in attachment 9, Essential is currently subject to the CESS for the 2019–24 period. We will continue to apply the CESS to Essential over the 2024–29 period. We consider that the CESS will provide sufficient incentives for Essential to achieve capex efficiency gains over that period. We are satisfied that the use of a forecast depreciation approach in combination with the application of the CESS and our other ex post capex measures are sufficient to achieve the capex incentive objective.<sup>65</sup>

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<sup>62</sup> NER, cl. 6.12.1(18) and S6.2.2B.

<sup>63</sup> Essential Energy, *5.01 our revenue requirement components*, January 2023, p. 4.

<sup>64</sup> AER, *Framework and approach: Ausgrid, Essential Energy and Essential Energy (New South Wales), Regulatory control period commencing 1 July 2024*, July 2022, p. 53.

<sup>65</sup> Our ex-post capex measures are set out in the capex incentives guideline, AER, *Capital expenditure incentive guideline for electricity network service providers*, April 2023, pp. 13–21. The guideline also sets out how all our capex incentive measures are consistent with the capex incentive objective.

## Shortened forms

Term	Definition
ABS	Australian Bureau of Statistics
AER	Australian Energy Regulator
Capex	capital expenditure
CESS	capital expenditure sharing scheme
CPI	consumer price index
F&A	Framework and approach
NER	National Electricity Rules
Opex	operating expenditure
PTRM	post-tax revenue model
RAB	regulatory asset base
RBA	Reserve Bank of Australia
RFM	roll forward model
RIN	regulatory information notice
WACC	weighted average cost of capital

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