

FINAL DECISION

Essential Energy distribution determination

2015−16 to 2018−19

Attachment 5 – Regulatory depreciation

April 2015

© Commonwealth of Australia 2015

This work is copyright. In addition to any use permitted under the Copyright Act 1968, all material contained within this work is provided under a Creative Commons Attributions 3.0 Australia licence, with the exception of:

* the Commonwealth Coat of Arms
* the ACCC and AER logos
* any illustration, diagram, photograph or graphic over which the Australian Competition and Consumer Commission does not hold copyright, but which may be part of or contained within this publication. The details of the relevant licence conditions are available on the Creative Commons website, as is the full legal code for the CC BY 3.0 AU licence.

Requests and inquiries concerning reproduction and rights should be addressed to the:

Director, Corporate Communications  
Australian Competition and Consumer Commission   
GPO Box 4141, Canberra ACT 2601

or publishing.unit@accc.gov.au.

Inquiries about this publication should be addressed to:

Australian Energy Regulator  
GPO Box 520  
Melbourne Vic 3001

Tel: (03) 9290 1444  
Fax: (03) 9290 1457

Email: [AERInquiry@aer.gov.au](mailto:AERInquiry@aer.gov.au)

AER reference: 54419

1. Note
2. This attachment forms part of the AER's final decision on Essential Energy’s regulatory proposal 2015–19. It should be read with other parts of the final decision.
3. The final decision includes the following documents:
4. 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

Attachment 9 - Efficiency benefit sharing scheme

Attachment 10 - Capital expenditure sharing scheme

Attachment 11 - Service target performance incentive scheme

Attachment 12 - Demand management incentive scheme

Attachment 13 - Classification of services

Attachment 14 - Control mechanism

Attachment 15 - Pass through events

Attachment 16 - Alternative control services

Attachment 17 - Negotiated services framework and criteria

Attachment 18 - Connection methodology

Attachment 19 - Analysis of Financial Viability

1. Contents

[Note 5-2](#_Toc414360483)

[Contents 5-3](#_Toc414360484)

[Shortened forms 5-4](#_Toc414360485)

[5 Regulatory depreciation 5-6](#_Toc414360486)

[5.1 Final decision 5-6](#_Toc414360487)

[5.2 Essential Energy’s revised proposal 5-7](#_Toc414360488)

[5.3 AER’s assessment approach 5-7](#_Toc414360489)

[5.4 Reasons for final decision 5-8](#_Toc414360490)

[5.4.1 Standard asset lives 5-8](#_Toc414360491)

[5.4.2 Remaining asset lives 5-8](#_Toc414360492)

1. Shortened forms

|  |  |
| --- | --- |
| 1. Shortened form | 1. Extended form |
| 1. AEMC | 1. Australian Energy Market Commission |
| 1. AEMO | 1. Australian Energy Market Operator |
| 1. AER | 1. Australian Energy Regulator |
| 1. augex | 1. augmentation expenditure |
| 1. capex | 1. capital expenditure |
| 1. CCP | 1. Consumer Challenge Panel |
| 1. CESS | 1. capital expenditure sharing scheme |
| 1. CPI | 1. consumer price index |
| 1. DRP | 1. debt risk premium |
| 1. DMIA | 1. demand management innovation allowance |
| 1. DMIS | 1. demand management incentive scheme |
| 1. distributor | 1. distribution network service provider |
| 1. DUoS | 1. distribution use of system |
| 1. EBSS | 1. efficiency benefit sharing scheme |
| 1. ERP | 1. equity risk premium |
| 1. Expenditure Assessment Guideline | 1. expenditure forecast assessment Guideline for electricity distribution |
| 1. F&A | 1. framework and approach |
| 1. MRP | 1. market risk premium |
| 1. NEL | 1. national electricity law |
| 1. NEM | 1. national electricity market |
| 1. NEO | 1. national electricity objective |
| 1. NER | 1. national electricity rules |
| 1. NSP | 1. network service provider |
| 1. opex | 1. operating expenditure |
| 1. PPI | 1. partial performance indicators |
| 1. PTRM | 1. post-tax revenue model |
| 1. RAB | 1. regulatory asset base |
| 1. RBA | 1. Reserve Bank of Australia |
| 1. repex | 1. replacement expenditure |
| 1. RFM | 1. roll forward model |
| 1. RIN | 1. regulatory information notice |
| 1. RPP | 1. revenue and pricing principles |
| 1. SAIDI | 1. system average interruption duration index |
| 1. SAIFI | 1. system average interruption frequency index |
| 1. SLCAPM | 1. Sharpe-Lintner capital asset pricing model |
| 1. STPIS | 1. service target performance incentive scheme |
| 1. WACC | 1. weighted average cost of capital |

# Regulatory depreciation

Depreciation is the allowance provided so capital investors recover their investment over the economic life of the asset (return of capital). We are required to decide on whether to approve the depreciation schedules submitted by Essential Energy.[[1]](#footnote-1) In doing so, we make determinations on the indexation of the regulatory asset base (RAB) and depreciation building block for Essential Energy's 2014–19 period. The regulatory depreciation allowance is the net total of straight-line depreciation (negative) less the indexation of the RAB (positive).

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

## Final decision

We do not accept Essential Energy's revised proposed regulatory depreciation allowance of $594.4 million ($ nominal) for the 2014–19 period.[[2]](#footnote-2) Instead we determine a regulatory depreciation allowance of $632.4 million ($ nominal). This amount represents an increase of 6.4 per cent on Essential Energy's revised proposed amount.

Our final decision on Essential Energy's regulatory depreciation allowance reflects our determinations on other components of Essential Energy's revised proposal which affect the forecast regulatory depreciation allowance—for example, the opening RAB at 1 July 2014 (attachment 2), the forecast inflation rate (attachment 3) and forecast capex allowance (attachment 6).

Table 5.1 sets out our final decision on Essential Energy's annual regulatory depreciation allowance over the 2014–19 period.

Table 5.1 AER's final decision on Essential Energy's depreciation allowance for the 2014–19 period ($ million, nominal)

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | 2014–15 | 2015–16 | 2016–17 | 2017–18 | 2018–19 | Total |
| Straight-line depreciation | 264.6 | 293.0 | 318.7 | 320.2 | 337.9 | 1534.4 |
| Less: inflation indexation on opening RAB | 161.2 | 171.1 | 180.7 | 190.0 | 199.0 | 902.0 |
| **Regulatory depreciation** | **103.4** | **122.0** | **138.0** | **130.2** | **138.9** | **632.4** |

Source: AER analysis.

## Essential Energy’s revised proposal

Essential Energy's revised proposal for the 2014–19 period forecasts a total regulatory depreciation allowance of $594.4 million ($ nominal). Essential Energy's methodology for determining its regulatory depreciation allowance is unchanged from its initial proposal. We accepted the approach in our draft decision. To calculate the depreciation allowance, Essential Energy's revised proposal used:[[3]](#footnote-3)

* the straight-line depreciation method employed in our post-tax revenue model (PTRM)
* the revised closing RAB value at 30 June 2014 derived from our roll forward model (RFM)
* the revised remaining asset lives for depreciating existing assets at 1 July 2014, due to updates made for actual capex in 2013–14
* the revised proposed forecast capex for the 2014–19 period
* the standard asset lives accepted in the draft decision for depreciating new assets associated with forecast capex for the 2014–19 period.

Further, Essential Energy's revised proposal noted that it would consider proposing shorter standard asset lives and remaining asset lives at the next determination.[[4]](#footnote-4)

Table 5.2 sets out Essential Energy's revised proposed depreciation allowance for the 2014–19 period.

Table 5.2 Essential Energy's revised proposed depreciation allowance for the period 2014–19 ($ million, nominal)

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | 2014–15 | 2015–16 | 2016–17 | 2017–18 | 2018–19 | Total |
| Straight-line depreciation | 265.1 | 294.8 | 322.1 | 325.3 | 344.8 | 1552.1 |
| Less: inflation indexation on opening RAB | 166.3 | 181.0 | 192.4 | 203.5 | 214.5 | 957.7 |
| **Regulatory depreciation** | **98.8** | **113.8** | **129.7** | **121.8** | **130.3** | **594.4** |

Source: Essential Energy, Revised regulatory proposal, January 2015, Attachment 5.5.

## AER’s assessment approach

We did not change our assessment approach for the regulatory depreciation allowance from our draft decision. Section 5.3 of our draft decision details that approach.[[5]](#footnote-5)

## Reasons for final decision

We determine a regulatory depreciation allowance of $632.4 million ($ nominal) for Essential Energy for the 2014–19 period. In determining this allowance we accept Essential Energy's revised proposed standard asset lives. However, we increased Essential Energy's proposed regulatory depreciation allowance by $38.0 million (or 6.4 per cent). This amendment reflects our:

* updates to the remaining asset lives (section 5.4.2)
* determinations on other components of Essential Energy's revised proposal—for example, the opening RAB at 1 July 2014 (attachment 2), the forecast inflation rate (attachment 3) and forecast capex (attachment 6)—affecting the forecast regulatory depreciation allowance. In particular, the lower forecast inflation rate used in this final decision means the resulting regulatory depreciation allowance (which nets out the inflation indexation on the opening RAB) is higher than proposed.

### Standard asset lives

Consistent with our draft decision, we accept Essential Energy's proposed standard asset lives for its existing asset classes. This is because they are consistent with our approved standard asset lives for the 2009–14 regulatory control period.[[6]](#footnote-6) We are satisfied the standard asset lives reflect the nature of the assets over the economic lives of the asset classes.[[7]](#footnote-7)

In the draft decision, we allocated the opening value at 1 July 2014 of the 'Emergency spares (major plant, excludes inventory)' asset class to the 'Furniture, fittings, plant and equipment' asset class.[[8]](#footnote-8) This was because the 'Emergency spares (major plant, excludes inventory)' asset class was no longer required and there were no plans to allocate future capex to this asset class. We therefore removed this asset class from the PTRM. Essential Energy's revised proposal PTRM adopted our draft decision reallocation of these asset values.[[9]](#footnote-9)

Table 5.3 sets out our final decision on Essential Energy's standard asset lives for the 2014–19 period.

### Remaining asset lives

Consistent with our draft decision, we accept Essential Energy's revised proposed weighted average method to determining remaining asset lives at 1 July 2014.

In the draft decision, we accepted Essential Energy's proposed weighted average method for calculating the remaining asset lives at 1 July 2014. The proposed method is consistent with our preferred approach. We noted that the remaining asset lives would be updated for the final decision because Essential Energy's revised proposal would include revisions for 2013–14 actual capex. Those actual capex values are used to calculate the weighted average remaining asset lives.[[10]](#footnote-10) Based on the adjustments made to the 2009–14 capex in the RAB roll forward as discussed in attachment 2, we have updated Essential Energy's remaining asset lives at 1 July 2014 for this final decision.

Table 5.3 sets out our final decision on Essential Energy's remaining asset lives for the 2014–19 period.

Table 5. AER's final decision on Essential Energy's standard and remaining asset lives at 1 July 2014 (years)

| Asset class | Standard asset life | Remaining asset life at 1 July 2014 |
| --- | --- | --- |
| Sub-transmission lines and cables | 54.9 | 36.9 |
| Distribution lines and cables | 53.8 | 42.2 |
| Substations | 40.2 | 25.2 |
| Transformers | 45.8 | 25.7 |
| Low voltage lines and cables | 51.5 | 29.9 |
| Customer metering and load control | 25.9 | 17.9 |
| Communications | 7.0 | 5.4 |
| Land | n/a | n/a |
| Easements | n/a | n/a |
| IT systems | 5.0 | 3.2 |
| Furniture, fittings, plant and equipment | 13.0 | 8.7 |
| Motor vehicles | 8.0 | 5.0 |
| Buildings | 50.0 | 47.6 |
| Land (non-system) | n/a | n/a |
| Other non-system assets | 15.0 | 13.4 |
| Equity raising costs | 44.7 | 40.7 |

Source: AER analysis.

n/a: not applicable.

1. NER, cl 6.12.1(8). [↑](#footnote-ref-1)
2. Essential Energy, Revised regulatory proposal, January 2015, Attachment 5.5. [↑](#footnote-ref-2)
3. Essential Energy, Revised regulatory proposal, January 2015, Attachment 5.5. [↑](#footnote-ref-3)
4. Essential Energy, Revised regulatory proposal, January 2015, pp. 87–88. [↑](#footnote-ref-4)
5. AER, Draft decision - Essential Energy distribution determination attachment 5 - Regulatory depreciation, November 2014, pp. 8–10. [↑](#footnote-ref-5)
6. AER, Draft decision - Essential Energy distribution determination attachment 5 - Regulatory depreciation, November 2014, pp. 13–14. [↑](#footnote-ref-6)
7. NER, cl 6.5.5(b)(1). [↑](#footnote-ref-7)
8. AER, Draft decision - Essential Energy distribution determination attachment 5 - Regulatory depreciation, November 2014, p. 13. [↑](#footnote-ref-8)
9. Essential Energy, Revised regulatory proposal, January 2015, Attachment 5.5. [↑](#footnote-ref-9)
10. AER, Draft decision - Essential Energy distribution determination attachment 5 - Regulatory depreciation, November 2014, p. 13. [↑](#footnote-ref-10)