FINAL DECISION
Essential Energy distribution determination
2015−16 to 2018−19

Attachment 5 – Regulatory depreciation

April 2015

AUSTRALIAN ENERGY REGULATOR

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Note

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.

The final 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

Attachment 9 - Efficiency benefit sharing scheme

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Attachment 11 - Service target performance incentive scheme

Attachment 12 - Demand management incentive scheme

Attachment 13 - Classification of services

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Attachment 19 - Analysis of Financial Viability

Contents

Shortened forms

Shortened form	Extended form
AEMC	Australian Energy Market Commission
AEMO	Australian Energy Market Operator
AER	Australian Energy Regulator
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
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). We are required to decide on whether to approve the depreciation schedules submitted by Essential Energy.[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.

5.1 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] 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.

1 NER, cl 6.12.1(8).

2 Essential Energy, *Revised regulatory proposal*, January 2015, Attachment 5.5.

5.2 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]

- 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]

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.

5.3 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]

3 Essential Energy, *Revised regulatory proposal*, January 2015, Attachment 5.5.

4 Essential Energy, *Revised regulatory proposal*, January 2015, pp. 87–88.

5 AER, *Draft decision - Essential Energy distribution determination attachment 5 - Regulatory depreciation*, November 2014, pp. 8–10.

5.4 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.

5.4.1 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] We are satisfied the standard asset lives reflect the nature of the assets over the economic lives of the asset classes.[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] 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]

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

5.4.2 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.

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6 AER, *Draft decision - Essential Energy distribution determination attachment 5 - Regulatory depreciation*, November 2014, pp. 13–14.

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

8 AER, *Draft decision - Essential Energy distribution determination attachment 5 - Regulatory depreciation*, November 2014, p. 13.

9 Essential Energy, *Revised regulatory proposal*, January 2015, Attachment 5.5.

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] 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 5.3 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.

[10] AER, *Draft decision - Essential Energy distribution determination attachment 5 - Regulatory depreciation*, November 2014, p. 13.