



**FINAL DECISION**  
**Endeavour Energy distribution**  
**determination**  
**2015–16 to 2018–19**

**Attachment 5 – Regulatory**  
**depreciation**

April 2015

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## Note

This attachment forms part of the AER's final decision on Endeavour 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

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 policy

Attachment 19 - Analysis of financial viability

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## 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

Shortened form	Extended form
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 Endeavour Energy.<sup>1</sup> In doing so, we make determinations on the indexation of the regulatory asset base (RAB) and depreciation building blocks for Endeavour 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 Endeavour 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 Endeavour Energy's revised proposed regulatory depreciation allowance of \$397.4 million (\$ nominal) for the 2014–19 period.<sup>2</sup> Instead we determine a regulatory depreciation allowance of \$431.7 million (\$ nominal). This amount represents an increase of 8.6 per cent on Endeavour Energy's revised proposed amount.

Our final decision on Endeavour Energy's regulatory depreciation allowance reflects our determination on another component of Endeavour Energy's revised proposal which affects the forecast regulatory depreciation allowance—the forecast inflation rate (attachment 3).

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

**Table 5.1 AER's final decision on Endeavour 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	202.1	220.4	237.8	247.2	258.5	1166.0
Less: inflation indexation on opening RAB	132.8	141.5	148.1	153.4	158.5	734.3
<b>Regulatory depreciation</b>	<b>69.3</b>	<b>78.9</b>	<b>89.7</b>	<b>93.8</b>	<b>100.0</b>	<b>431.7</b>

Source: AER analysis.

<sup>1</sup> NER, cl 6.12.1(8).

<sup>2</sup> Endeavour Energy, *Revised regulatory proposal*, January 2015, Attachment 4.01a.

## 5.2 Endeavour Energy's revised proposal

Endeavour Energy's revised proposal for the 2014–19 period forecasts a total regulatory depreciation allowance of \$397.4 million (\$ nominal). Endeavour 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, Endeavour Energy's revised proposal used:<sup>3</sup>

- the straight-line depreciation method employed in our post-tax revenue model (PTRM)
- the revised closing RAB value as 30 June 2014 derived from our roll forward model (RFM)
- the revised remaining asset lives as 1 July 2014 for depreciating existing assets in the closing RAB as 30 June 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, Endeavour Energy's revised proposal noted that it would consider proposing shorter standard asset lives and remaining asset lives at the next determination.<sup>4</sup>

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

**Table 5.2 Endeavour 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	202.4	221.0	238.8	248.6	260.4	1171.3
Less: inflation indexation on opening RAB	139.5	148.8	156.1	161.9	167.5	773.8
<b>Regulatory depreciation</b>	<b>62.8</b>	<b>72.2</b>	<b>82.8</b>	<b>86.7</b>	<b>92.9</b>	<b>397.4</b>

Source: Endeavour Energy, *Revised regulatory proposal*, January 2015, Attachment 4.01a.

## 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.<sup>5</sup>

<sup>3</sup> Endeavour Energy, *Revised regulatory proposal*, January 2015, Attachment 4.01a.

<sup>4</sup> Endeavour Energy, *Revised regulatory proposal*, January 2015, pp. 73–74.

<sup>5</sup> AER, *Draft decision - Endeavour 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 \$431.7 million (\$ nominal) for Endeavour Energy for the 2014–19 period. In determining this allowance we accept Endeavour Energy's revised proposed standard asset lives and remaining asset lives as 1 July 2014. However, we increased Endeavour Energy's proposed regulatory depreciation allowance by \$34.3 million (or 8.6 per cent). This amendment reflects our determination on changing another component of Endeavour Energy's revised proposal—the forecast inflation rate (attachment 3)—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 Endeavour 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. We are satisfied the standard asset lives reflect the nature of the assets over the economic lives of the asset classes.<sup>6</sup>

In the draft decision, we corrected Endeavour Energy's approach to setting the standard asset life for 'Equity raising costs'.<sup>7</sup> Endeavour Energy's revised proposal PTRM adopted our draft decision approach to setting this standard asset life.<sup>8</sup>

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

### 5.4.2 Remaining asset lives

Consistent with our draft decision, we accept Endeavour Energy's revised proposed remaining asset lives as 1 July 2014.

In the draft decision, we accepted Endeavour Energy's proposed weighted average method for calculating the remaining asset lives as 1 July 2014. The proposed method is consistent with our preferred approach. However, we did not accept Endeavour Energy's proposed adjustment to the remaining asset life for its 'Customer metering and load control' asset class. Endeavour Energy's revised proposal PTRM adopted our draft decision approach to determining the remaining asset life for this asset class.<sup>9</sup>

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<sup>6</sup> NER, cl 6.5.5(b)(1).

<sup>7</sup> AER, *Draft decision - Endeavour Energy distribution determination attachment 5 - Regulatory depreciation*, November 2014, p. 12.

<sup>8</sup> Endeavour Energy, *Revised regulatory proposal*, January 2015, Attachment 4.01a.

<sup>9</sup> AER, *Draft decision - Endeavour Energy distribution determination attachment 5 - Regulatory depreciation*, November 2014, p. 12.

We also noted that the remaining asset lives would be updated for the final decision because Endeavour Energy's revised proposal would include revisions for 2013–14 actual capex. Those capex values are used to calculate the weighted average remaining asset lives.<sup>10</sup> We are satisfied that the updates to the 2013–14 actual capex have been reflected in the revised proposed remaining asset lives.

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

**Table 5.3 AER's final decision on Endeavour Energy's standard and remaining asset lives as 1 July 2014 (years)**

Asset class	Standard asset life	Remaining asset life as 1 July 2014
Sub-transmission lines and cables	47.4	30.4
Distribution lines and cables	50.6	38.3
Substations	40.0	28.2
Transformers	44.3	24.9
Low voltage lines and cables	52.4	27.9
Customer metering and load control	25.0	22.8
Communication	8.4	7.1
Land	n/a	n/a
Easements	n/a	n/a
Equity raising costs	44.5	37.0
Emergency spares (major plant, excludes inventory)	23.6	10.8
Information & communication technology	5.0	3.4
Furniture, fittings, plant and equipment	13.0	7.8
Motor vehicles	8.0	5.6
Buildings	50.0	44.7
Land (non-system)	n/a	n/a
Other non-system assets	n/a	n/a

Source: AER analysis.

n/a: not applicable.

<sup>10</sup> AER, *Draft decision - Endeavour Energy distribution determination attachment 5 - Regulatory depreciation*, November 2014, p. 12.