



FINAL DECISION
ActewAGL 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 ActewAGL'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 - Pricing methodology

Attachment 20 - 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 that 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 ActewAGL.¹ In doing so, we make determinations on the indexation of the regulatory asset base (RAB) and depreciation building blocks for ActewAGL'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 ActewAGL'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 ActewAGL's revised proposed regulatory depreciation allowances of \$154.5 million and \$26.1 million (\$ nominal) for the 2014–19 period for its distribution and transmission networks respectively. Instead, we determine regulatory depreciation allowances of \$158.2 million and \$26.9 million (\$ nominal) for its distribution and transmission networks respectively. These represent increases of 2.4 per cent and 0.8 per cent for ActewAGL's distribution and transmission networks respectively.

Our final decision on ActewAGL's regulatory depreciation allowances reflects our determinations on other components of ActewAGL's revised proposal which affect the forecast regulatory depreciation allowance—for example, the forecast inflation rate (attachment 3) and forecast capex allowance (attachment 6).

Table 5.1 and Table 5.2 set out our final decision on the annual regulatory depreciation allowances over the 2014–19 period for ActewAGL's distribution and transmission networks respectively.

Table 5.1 AER's final decision on ActewAGL's depreciation allowance – distribution (\$ millions, nominal)

	2014–15	2015–16	2016–17	2017–18	2018–19	Total
Straight-line depreciation	44.1	48.8	49.9	51.9	52.3	246.9
Less: inflation indexation on opening RAB	16.5	17.4	17.9	18.3	18.7	88.7
Regulatory depreciation	27.6	31.4	32.0	33.5	33.7	158.2

Source: AER analysis.

¹ NER, cl 6.12.1(8).

Table 5.2 AER's final decision on ActewAGL's depreciation allowance – transmission (\$ millions, nominal)

	2014–15	2015–16	2016–17	2017–18	2018–19	Total
Straight-line depreciation	8.0	9.0	9.4	10.2	10.6	47.3
Less: inflation indexation on opening RAB	3.7	3.8	4.0	4.3	4.6	20.4
Regulatory depreciation	4.4	5.2	5.4	5.8	6.1	26.9

Source: AER analysis.

5.2 ActewAGL's revised proposal

ActewAGL's revised proposal for the 2014–19 period forecasts total regulatory depreciation allowances of \$154.5 million and \$26.1 million (\$ nominal) for its distribution and transmission networks respectively. ActewAGL'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, ActewAGL's revised proposal used:²

- the straight-line depreciation method employed in the AER's post-tax revenue model (PTRM)
- the revised closing RAB values as at 30 June 2014 derived from the AER's roll forward model (RFM)
- the revised remaining asset lives as at 1 July 2014 for depreciating existing assets in the closing RAB as at 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.

Table 5.3 and Table 5.4 set out ActewAGL's revised proposed depreciation allowances for the 2014–19 period for its distribution and transmission networks respectively.

² ActewAGL, *Revised regulatory proposal*, January 2015, p.411.

Table 5.3 ActewAGL's revised proposed depreciation allowance for the 2014–19 period – distribution (\$ million, nominal)

	2014–15	2015–16	2016–17	2017–18	2018–19	Total
Straight-line depreciation	44.1	49.0	50.2	52.4	53.1	248.8
Less: inflation indexation on opening RAB	17.3	18.4	19.0	19.6	20.1	94.3
Regulatory depreciation	26.8	30.7	31.2	32.8	33.0	154.5

Source: ActewAGL, *Revised regulatory proposal*, January 2015, Attachment H.8.

Table 5.4 ActewAGL's revised proposed depreciation allowance for the 2014–19 period – transmission (\$ million, nominal)

	2014–15	2015–16	2016–17	2017–18	2018–19	Total
Straight-line depreciation	8.0	9.0	9.5	10.4	11.1	48.1
Less: inflation indexation on opening RAB	3.9	4.0	4.2	4.7	5.2	22.0
Regulatory depreciation	4.2	5.0	5.3	5.7	5.9	26.1

Source: ActewAGL, *Revised regulatory proposal*, January 2015, Attachment H.9.

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.³

5.4 Reasons for final decision

We determine regulatory depreciation allowances of \$158.2 million and \$26.9 million (\$ nominal) for ActewAGL's distribution and transmission networks respectively. In determining these allowances we accept ActewAGL's revised proposed standard asset lives, and the revised proposed remaining asset lives as at 1 July 2014 updated to reflect ActewAGL's actual capex for 2013–14. However, we increased ActewAGL's proposed distribution and transmission forecast regulatory depreciation allowances by \$3.7 million (or 2.4 per cent) and \$0.8 million (or 3.2 per cent), respectively. Our amendments are mainly driven by our determinations on other components of ActewAGL's revised proposal—for example, 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.

³ AER, *Draft decision - ActewAGL distribution determination, Attachment 5: Regulatory depreciation*, November 2014, pp. 9–11.

5.4.1 Standard asset lives

Consistent with our draft decision, we accept ActewAGL'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 these proposed standard asset lives reflect the nature of the assets over the economic lives of the asset classes.⁴

Table 5.5 and Table 5.6 set out our final decision on ActewAGL's standard asset lives for the 2014–19 period, for its distribution and transmission networks respectively.

5.4.2 Remaining asset lives

We accept ActewAGL's revised proposed remaining asset lives as at 1 July 2014, which reflect the updates made in the RAB roll forward for 2013–14 actual capex as discussed in attachment 2.

In the draft decision, we noted that the remaining asset lives would be updated for the final decision because ActewAGL's revised proposal would include revisions for 2013–14 actual capex. This is because the 2013–14 capex values are used to calculate the remaining asset lives. We are satisfied that the updates to the 2013–14 actual capex have been reflected in the revised proposed remaining asset lives.

Consistent with our draft decision, we note our concerns with ActewAGL's proposed approach⁵ to calculate the remaining asset lives which differs from the AER's preferred weighted average remaining life approach.⁶ We consider ActewAGL's proposed approach tends to systematically underestimate the remaining asset life. We note that in ActewAGL's case the biased effect of the proposed approach is immaterial because most assets are concentrated in a single historical asset class ('Opening distribution assets') that does not have any capex added to it.⁷ This asset class includes all assets prior to 1 July 2009, which will expire in about 15 years for regulatory depreciation purposes. Because no new assets are added to this asset class, there is no issue of having to weight assets with different remaining asset lives. However, this situation is likely to change in future as capex is added to an expanded list of other asset classes used by ActewAGL after 1 July 2009. Given our concerns we will review this matter further if this approach is proposed again at the next determination. Table 5.5 and

⁴ NER, cl 6.5.5(b)(1).

⁵ ActewAGL's approach uses depreciation from the final year of the 2009–14 regulatory control period to determine the remaining asset lives. The remaining asset value as at 30 June 2014 is divided by the depreciation for 2013–14.

⁶ The AER's approach rolls forward the remaining asset life for an asset class from the beginning of the 2009–14 regulatory control period. We consider this approach better reflects the mix of assets within that 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.

⁷ In the 2009 determination new disaggregated asset classes were introduced from 1 July 2009. All capex incurred over the 2009–14 regulatory control period was allocated to the new disaggregated asset classes.

Table 5.6 set out our final decision on ActewAGL's remaining asset lives for the 2014–19 period, for its distribution and transmission networks respectively.

Table 5.5 AER's final decision on ActewAGL's standard and remaining asset lives as at 1 July 2014 (years) – distribution

Asset class	Standard asset life	Remaining asset lives as at 1 July 2014
Opening distribution assets*	n/a	14.7
Zone substation	40.0	37.6
Distribution substations	40.0	37.9
Distribution overhead lines	50.0	47.9
Distribution underground lines	60.0	57.8
IT & communication systems (networks)	10.0	9.3
Motor vehicles	7.0	6.2
Other non-system assets (networks)	5.0	2.8
IT systems (corporate)	5.0	4.1
Telecommunications (corporate)	5.0	1.9
Other non-system assets (corporate)	5.0	2.1
Land	n/a	n/a
Buildings	60.0	57.0
Equity raising costs	44.5	40.5

Source: AER analysis.

Table 5.6 AER's final decision on ActewAGL's standard and remaining asset lives as at 1 July 2014 (years) – transmission

Asset class	Standard asset life	Remaining asset lives as at 1 July 2014
Opening distribution assets*	n/a	14.7
Sub-transmission overhead	40.0	37.5
Sub-transmission underground	60.0	n/a
Zone substation	40.0	38.6
IT & communication systems (networks)	10.0	9.3
Motor vehicles	7.0	6.2
Other non-system assets (networks)	5.0	2.8
IT systems (corporate)	5.0	4.1
Telecommunications (corporate)	5.0	1.9
Other non-system assets (corporate)	5.0	2.1
Land	n/a	n/a
Buildings	60.0	57.0
Equity raising costs	44.5	40.5

Source: AER analysis.