



FINAL DECISION
Ausgrid distribution
determination
2015–16 to 2018–19

Attachment 2 – Regulatory
asset base

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@acc.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

AER reference: 52294

Note

This attachment forms part of the AER's final decision on Ausgrid's revenue proposal for 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 methodology

Attachment 19 - Pricing methodology

Attachment 20 - Analysis of financial viability

Contents

Note	2-2
Contents	2-3
Shortened forms	2-4
2 Regulatory asset base.....	2-6
2.1 Final decision	2-6
2.2 Ausgrid’s revised proposal.....	2-8
2.3 AER’s assessment approach.....	2-9
2.4 Reasons for final decision	2-10
2.4.1 Opening RAB as at 1 July 2014	2-10
2.4.2 Forecast closing RAB as at 30 June 2019.....	2-11

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

2 Regulatory asset base

We are required to make a decision on Ausgrid's opening regulatory asset bases (RABs) as at 1 July 2014 for its distribution and transmission networks.¹ We use the RAB at the start of each regulatory year to determine the return of capital (regulatory depreciation) and return on capital building block allowances. This attachment presents our final decision on the opening RAB values as at 1 July 2014 and the roll forward of the forecast RAB values over the 2014–19 period.

2.1 Final decision

We accept Ausgrid's revised proposed opening RABs as at 1 July 2014 of \$12 251.7 million and \$2035.7 million (\$ nominal) for its distribution and transmission networks respectively. Ausgrid's revised proposal adopted all our draft decision amendments to its distribution and transmission RABs as at 1 July 2014.²

We note Ausgrid's revised proposal adopted our draft decision on the use of forecast depreciation for establishing the RABs at the commencement of the regulatory control period from 1 July 2019.³ We therefore maintain our draft decision position on this issue for this final decision.

We determine forecast closing RAB values at 30 June 2019 of \$14 400.1 million and \$2259.1 million (\$ nominal) for Ausgrid's distribution and transmission networks respectively. This represents reductions of \$646.9 million (or 4.3 per cent) and \$100.2 million (or 4.2 per cent) from Ausgrid's revised proposal for its distribution and transmission networks respectively. Our final decision on the forecast closing RABs reflects our adjustments to Ausgrid's forecast capex (attachment 6), forecast regulatory depreciation (attachment 5) and the forecast inflation rate (attachment 3).

Table 2.3 and Table 2.4 set out our final decision on the forecast RAB values over the 2014–19 period for Ausgrid's distribution and transmission networks respectively.

Table 2.1 and Table 2.2 set out our final decision on the roll forward of the RAB values over the 2009–14 regulatory control period for Ausgrid's distribution and transmission networks respectively.

We determine forecast closing RAB values at 30 June 2019 of \$14 400.1 million and \$2259.1 million (\$ nominal) for Ausgrid's distribution and transmission networks respectively. This represents reductions of \$646.9 million (or 4.3 per cent) and \$100.2

¹ NER, cls. 6.12.1(6), 6.26(b).

² Ausgrid, *Revised regulatory proposal*, January 2015, pp. 61-62.

³ Ausgrid, *Revised regulatory proposal*, January 2015, p. 61.

million (or 4.2 per cent) from Ausgrid's revised proposal for its distribution and transmission networks respectively. Our final decision on the forecast closing RABs reflects our adjustments to Ausgrid's forecast capex (attachment 6), forecast regulatory depreciation (attachment 5) and the forecast inflation rate (attachment 3).

Table 2.3 and Table 2.4 set out our final decision on the forecast RAB values over the 2014–19 period for Ausgrid's distribution and transmission networks respectively.

Table 2.1 AER's final decision on Ausgrid's RAB for the 2009–14 regulatory control period – distribution (\$ million, nominal)

	2009–10	2010–11	2011–12	2012–13	2013–14
Opening RAB	7297.2	8297.9	9531.2	10875.0	11681.6
Capital expenditure ^a	1129.2	1304.7	1390.9	1049.2	605.4
Inflation indexation on opening RAB	132.8	236.1	323.0	191.7	286.2
Less: straight-line depreciation	261.3	307.5	370.2	434.2	448.6
Closing RAB	8297.9	9531.2	10875.0	11681.6	12124.7
Difference between estimated and actual capex (1 July 2008 to 30 June 2009)					239.1
Return on difference for 2008-09 capex					145.9
Closing RAB as at 30 June 2014					12509.7
Dual function assets moved from transmission to distribution					9.2
Meters moved to alternative control services					-267.2
Opening RAB as at 1 July 2014					12251.7

Source: AER analysis.

(a) Net of disposals and capital contributions, and adjusted for CPI.

Table 2.2 AER's final decision on Ausgrid's RAB for the 2009–14 regulatory control period – transmission (\$ million, nominal)

	2009–10	2010–11	2011–12	2012–13	2013–14
Opening RAB	1028.5	1264.1	1544.8	1862.1	2066.6
Capital expenditure ^a	235.4	276.1	340.3	216.4	86.3
Inflation indexation on opening RAB	29.7	42.1	24.5	46.6	60.5
Less: straight-line depreciation	29.5	37.5	47.5	58.5	63.3

Closing RAB	1264.1	1544.8	1862.1	2066.6	2150.1
Difference between estimated and actual capex (1 July 2008 to 30 June 2009)					-64.7
Return on difference for 2008-09 capex					-40.5
Closing RAB as at 30 June 2014					2045.0
Dual function assets moved from transmission to distribution					-9.2
Opening RAB as at 1 July 2014					2035.7

Source: AER analysis.

(a) Net of disposals and capital contributions, and adjusted for CPI.

Table 2.3 AER's final decision on Ausgrid's RAB for the 2014–19 period – distribution (\$ million, nominal)

	2014–15	2015–16	2016–17	2017–18	2018–19
Opening RAB	12251.7	12703.0	13169.4	13569.9	14015.9
Capital expenditure ^a	598.0	632.9	588.7	604.8	544.6
Inflation indexation on opening RAB	291.6	302.3	313.4	323.0	333.6
Less: straight-line depreciation	438.3	468.9	501.6	481.7	494.0
Closing RAB	12703.0	13169.4	13569.9	14015.9	14400.1

Source: AER analysis.

(a) Net of forecast disposals and capital contributions.

Table 2.4 AER's final decision on Ausgrid's RAB for the 2014–19 period – transmission (\$ million, nominal)

	2014–15	2015–16	2016–17	2017–18	2018–19
Opening RAB	2035.7	2049.4	2086.2	2188.8	2229.1
Capital expenditure ^a	28.2	55.2	125.4	60.9	50.5
Inflation indexation on opening RAB	48.5	48.8	49.7	52.1	53.1
Less: straight-line depreciation	63.0	67.2	72.5	72.7	73.5
Closing RAB	2049.4	2086.2	2188.8	2229.1	2259.1

Source: AER analysis.

(a) Net of forecast disposals and capital contributions.

2.2 Ausgrid's revised proposal

Ausgrid's revised proposal submitted opening RAB values as at 1 July 2014 of \$12 251.7 million and \$2035.7 million (\$ nominal) for its distribution and transmission networks respectively. Ausgrid adopted all our draft decision adjustments to roll forward the opening RAB from 1 July 2009 to 30 June 2014.⁴

Ausgrid's revised proposal submitted forecast closing RABs as at 30 June 2019 of \$15 047.0 million and \$2359.3 million (\$ nominal) for its distribution and transmission network respectively. These values reflect its revised forecast capex and forecast depreciation (based on forecast capex) over the 2014–19 period. Ausgrid's projected distribution and transmission RABs over the 2014–19 period are respectively shown in Table 2.5 and Table 2.6.

Table 2.5 Ausgrid's proposed RAB for the 2014–19 period (\$ million, nominal) – distribution

	2014–15	2015–16	2016–17	2017–18	2018–19
Opening RAB	12251.7	12821.6	13451.4	13999.1	14572.2
Capital expenditure ^a	702.5	782.1	721.8	717.9	621.5
Inflation indexation on opening RAB	306.3	320.5	336.3	350.0	364.3
Less: straight-line depreciation	438.8	472.8	510.4	494.9	511.0
Closing RAB	12821.6	13451.4	13999.1	14572.2	15047.0

Source: Ausgrid, *Revised regulatory proposal*, January 2015, Attachment 4.08.

(a) Net of forecast disposals and capital contributions.

Table 2.6 Ausgrid's proposed RAB for the 2014–19 period (\$ million, nominal) – transmission

	2014–15	2015–16	2016–17	2017–18	2018–19
Opening RAB	2035.7	2065.4	2129.3	2266.3	2320.4
Capital expenditure ^a	41.8	80.0	157.9	72.7	57.5
Inflation indexation on opening RAB	50.9	51.6	53.2	56.7	58.0
Less: straight-line depreciation	63.0	67.7	74.1	75.3	76.7
Closing RAB	2065.4	2129.3	2266.3	2320.4	2359.3

Source: Ausgrid, *Revised regulatory proposal*, January 2015, Attachment 4.09.

(a) Net of forecast disposals and capital contributions.

⁴ Ausgrid, *Revised regulatory proposal*, January 2015, pp. 61-62.

Ausgrid's revised proposal adopted our draft decision to use the forecast depreciation approach for establishing the RAB at the commencement of the regulatory control period from 1 July 2019.⁵

2.3 AER's assessment approach

We did not change our assessment approach for the RAB from our draft decision. Section 2.3 of our draft decision details that approach.⁶

2.4 Reasons for final decision

We accept Ausgrid's revised proposed opening distribution and transmission RABs of \$12 251.7 million and \$2035.7 million (\$ nominal) respectively, as at 1 July 2014.

Based on these approved opening RABs we forecast Ausgrid's closing distribution and transmission RAB values to be \$14 400.1 million and \$2259.1 million (\$ nominal) respectively, as at 30 June 2019. These represent reductions of \$646.9 million or 4.3 per cent and \$100.2 million (\$ nominal) or 4.2 per cent compared to Ausgrid's revised proposal respectively. The reasons for our decision are discussed below.

2.4.1 Opening RAB as at 1 July 2014

We accept Ausgrid's revised proposed opening RAB values of \$12 251.7 million for its distribution network and \$2035.7 million (\$ nominal) for its transmission network, as at 1 July 2014.

In the draft decision, we made a number of adjustments to Ausgrid's roll forward of its distribution and transmission RABs over the 2009–14 regulatory control period. These adjustments included an update to estimates of capex for 2013–14 to reflect actuals. We noted we would review these updates with the audited annual reporting RIN to be submitted after the draft decision.⁷

Ausgrid's revised proposal adopted all our draft decision adjustments to roll forward the opening RABs from 1 July 2009 to 1 July 2014. Ausgrid's revised proposal did not make any further update to the 2013–14 capex from the values adopted in the draft decision. We have reconciled the 2013–14 capex in the revised proposal against Ausgrid's annual RIN for that year. We therefore accept the actual capex for 2013–14, and the revised proposed opening RABs for Ausgrid's distribution and transmission networks.

⁵ Ausgrid, *Revised regulatory proposal*, January 2015, p. 61.

⁶ AER, *Draft decision - Ausgrid distribution determination attachment 2 - Regulatory asset base*, November 2014, pp. 20-26.

⁷ AER, *Draft decision - Ausgrid distribution determination, - Attachment 2 - Regulatory asset base*, November 2014, p. 20.

PIAC raised concerns with the size of Ausgrid's opening RAB in its submission to the draft decision.⁸ Its submission suggested the potential for writing off some parts of the RAB. We note that the opening RAB reflects the capex incurred during the previous regulatory control periods. In the previous two regulatory control periods there was a significant increase in capex that only began to tail off in more recent years. We have no ability to adjust for past capex or to optimise/write down the opening RAB for efficiency considerations. Under the transitional rules, the review of past capex does not apply to Ausgrid prior to 1 July 2015.⁹ Therefore, for the purposes of this final decision, we are required to add Ausgrid's actual capex from the 2009–14 regulatory control period to the RAB. However, with rule changes in 2012, we will have the ability to exclude inefficient capex incurred during the 2015–19 regulatory control period in future resets if it exceeds the approved forecast and if we consider it does not reasonably reflect the capital expenditure criteria.¹⁰ The details of our assessment approach for inefficient capex are set out in the *Capital expenditure incentive guideline*.¹¹

2.4.2 Forecast closing RAB as at 30 June 2019

We forecast closing RAB values of \$14 400.1 million and \$2259.1 million by 30 June 2019 for Ausgrid's distribution and transmission networks, respectively.

For Ausgrid's distribution RAB our decision results in a reduction of \$646.9 million (\$ nominal) or 4.3 per cent compared to Ausgrid's revised proposal. This reduction reflects our final decision on the inputs for determining the forecast distribution RAB in the post-tax revenue model (PTRM). To determine Ausgrid's forecast distribution RAB value, we amended the following PTRM inputs:

- We reduced Ausgrid's revised proposed forecast capex allowance by \$576.8 million (\$ nominal) or 16.3 per cent (attachment 6).
- We increased Ausgrid's revised proposed forecast regulatory depreciation allowance by \$70.1 million (\$ nominal) or 9.3 per cent (attachment 5).
- We reduced Ausgrid's revised proposed forecast inflation rate of 2.50 per cent per annum to 2.38 per cent per annum (attachment 3).

For Ausgrid's transmission RAB our decision results in a reduction of \$100.2 million (\$ nominal) or 4.2 per cent compared to Ausgrid's revised proposal. This reduction reflects our final decision on the inputs for determining the forecast transmission RAB in the PTRM. To determine Ausgrid's forecast transmission RAB value, we amended the following PTRM inputs:

⁸ PIAC, *Submission on NSW draft decisions*, 14 February 2015, pp. 60–61.

⁹ NER, cl. 11.56.5.

¹⁰ Under the NER, cl S6.2.2A(b), the exclusion of inefficient capex could only come from three areas including overspend in capex, margin paid to third party and capitalisation of opex as defined in cl S6.2.2A(c), (d) and (e) of the NER.

¹¹ AER, *Capital expenditure Incentive guideline*, November 2013, pp. 12–20.

- We reduced Ausgrid's revised proposed forecast capex allowance by \$89.8 million (\$ nominal) or 21.9 per cent (attachment 6).
- We increased Ausgrid's revised proposed forecast regulatory depreciation allowance by \$10.4 million or 12.0 per cent (attachment 5).
- We reduced Ausgrid's revised proposed forecast inflation rate of 2.50 per cent per annum to 2.38 per cent per annum (attachment 3).