FINAL DECISION
Ergon Energy determination 2015−16 to 2019−20

Attachment 2 − Regulatory asset base

October 2015

AUSTRALIAN ENERGY REGULATOR

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Note

This attachment forms part of the AER's final decision on Ergon Energy's 2015–20 distribution determination. It should be read with all 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

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Shortened forms

Shortened form	Extended form
ABS	Australian Bureau of Statistics
ACS	alternative control services
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

Shortened form	Extended form
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
SCS	standard control services
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 Ergon Energy's opening regulatory asset base (RAB) as at 1 July 2015.[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 value as at 1 July 2015 for Ergon Energy and roll forward of the forecast RAB values over the 2015–20 regulatory control period.

2.1 Final decision

We do not accept Ergon Energy's revised proposed opening RAB value of $10 055.8 million ($ nominal) as at 1 July 2015. We instead determine an opening RAB of $9872.7 million ($ nominal) as at 1 July 2015. This is because Ergon Energy's revised proposal repeated the error in its initial proposal of using incorrect remaining asset lives as at 1 July 2010. We also made adjustments to account for actual inflation for 2014–15, capitalised provisions, and removal of other assets used for alternative control services (ACS) besides meters.

For this final decision, we maintain our preliminary decision position on the use of forecast depreciation for establishing the RAB at the commencement of the regulatory control period from 1 July 2020. Ergon Energy's revised proposal noted our preliminary decision on this issue.[2]

Table 2.1 sets out our final decision on the roll forward of the RAB values for the 2010–15 regulatory control period.

We determine a forecast closing RAB value at 30 June 2020 of $12 184.0 million ($ nominal). This is $605.9 million (or 4.7 per cent) lower than the amount of $12 789.9 million ($ nominal) in Ergon Energy's revised proposal. Our final decision on the forecast closing RAB reflects our adjustments to Ergon Energy's opening RAB as at 1 July 2015, forecast capex (attachment 6), forecast regulatory depreciation (attachment 5), and the forecast inflation rate (attachment 3).

Table 2.2 sets out our final decision on the forecast RAB values for Ergon Energy over the 2015–20 regulatory control period.

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1 NER, cl. 6.12.1(6).

2 Ergon Energy, *Submission to the AER on its Preliminary Determination: SCS Building Blocks, Control Mechanism and Pricing,* 3 July 2015, p.13.

Table 2.1 AER's final decision on Ergon Energy's RAB for the 2010–15 regulatory control period ($ million, nominal)

	2010–11	2011–12	2012–13	2013–14	2014–15[a]
Opening RAB	7148.9	7848.5	8370.7	9038.0	9641.3
Capital expenditure[b]	809.5	748.3	836.5	743.8	794.1
Inflation indexation on opening RAB	238.1	124.0	209.3	264.8	128.2
Less: straight-line depreciation	348.0	350.2	378.3	405.3	407.2
Closing RAB	**7848.5**	**8370.7**	**9038.0**	**9641.3**	**10156.4**
Difference between estimated and actual 2009–10 capex (1 July 2009 to 30 June 2010)					–132.8
Return on difference for 2009–10 capex					–76.4
Closing RAB as at 30 June 2015					9947.2
Less: Assets moved to ACS and unregulated assets removed					74.2
Opening RAB as at 1 July 2015					**9873.0**

Source: AER analysis.

(a): Based on revised estimated capex. We will update for actual capex at the next reset.

(b): Net of disposals and adjusted for CPI.

Table 2.2 AER's final decision on Ergon Energy's RAB for the 2015–20 regulatory control period ($ million, nominal)

	2015–16	2016–17	2017–18	2018–19	2019–20
Opening RAB	9873.0	10368.7	10867.7	11332.5	11760.3
Capital expenditure[a]	688.0	635.1	598.6	569.0	571.7
Inflation indexation on opening RAB	246.8	259.2	271.7	283.3	294.0
Less: straight-line depreciation	439.1	395.3	405.4	424.5	441.9
Closing RAB	10368.7	10867.7	11332.5	11760.3	12184.0

Source: AER analysis.

(a): Net of forecast disposals and capital contributions.

2.2 Ergon Energy's revised proposal

Ergon Energy's revised proposal submitted an opening RAB value as at 1 July 2015 of $10 055.8 million ($ nominal) as set out in table 2.3.[3] Ergon Energy adopted the preliminary decision to not include the Hayman Island undersea cable in the opening RAB as at 1 July 2015. Ergon Energy also adopted the preliminary decision's removal of the movement of capitalised provisions from actual capex, although it did not implement this in its modelling of the RAB roll forward (the 'roll forward model' or RFM). It did not adopt the preliminary decision to remove certain assets from the standard control services (SCS) RAB now classified as assets for alternative control services (ACS). Ergon Energy also updated the revised proposed opening RAB to reflect a revised estimate of capex for 2014–15.[4]

Ergon Energy's revised proposal submitted a forecast closing RAB as at 30 June 2020 of $12 789.9 million ($ nominal). This value reflects its revised opening RAB, forecast capex and forecast depreciation (based on forecast capex) over the 2015–20 regulatory control period. Ergon Energy's projected RAB over the 2015–20 regulatory control period is shown in table 2.4.

Table 2.3 Ergon Energy's revised proposed RAB for the 2010–15 regulatory control period ($ million, nominal)

	2010–11	2011–12	2012–13	2013–14	2014–15[a]
Opening RAB	7148.9	7843.8	8376.0	9034.9	9649.2
Capital expenditure[b]	809.5	758.2	828.0	744.0	799.6
Inflation indexation on opening RAB	238.1	123.9	209.4	264.7	265.4
Less: straight-line depreciation	352.7	350.0	378.4	394.4	385.9
Closing RAB	7843.8	8376.0	9034.9	9649.2	10 328.2
Difference between estimated and actual 2009–10 capex (1 July 2009 to 30 June 2010)					–131.9
Return on difference for 2009–10 capex					–78.9
Closing RAB as at 30 June 2015					10 117.4
Less: Meters moved to ACS					61.6
Opening RAB as at 1 July 2015					**10 055.8**

Source: Ergon Energy, *Revised regulatory proposal*, July 2015, Attachments 03.01.07 and 03.01.08.

(a): Based on revised estimated capex.

3 In terms of its modelling, Ergon Energy submitted two separate RFMs that need to be added together. The Legacy RFM relates to assets existing before 1 July 2010, while the Capex RFM relates to assets acquired over the 2010-15 regulatory control period. The split was done to determine more accurate depreciation. Refer to the depreciation discussion in attachment 5 for details.

4 Ergon Energy, *Capex RFM*, July 2015.

(b): Net of disposals.

Table 2.4 Ergon Energy's revised proposed RAB for the 2015–20 regulatory control period ($ million, nominal)

	2015–16	2016–17	2017–18	2018–19	2019–20
Opening RAB	10 055.8	10 674.6	11 225.8	11 750.0	12 252.2
Capital expenditure[a]	781.0	730.3	692.3	673.3	686.2
Inflation indexation on opening RAB	256.4	272.2	286.3	299.6	312.4
Less: straight-line depreciation	418.7	451.4	454.3	470.8	461.0
Closing RAB	10 674.6	11 225.8	11 750.0	12 252.2	12 789.9

Source: Ergon Energy, *Revised regulatory proposal*, July 2015, Attachment 03.01.04.

(a) Net of disposals and capital contributions.

2.3 AER's assessment approach

We have not changed our assessment approach for the RAB from our preliminary decision. Section 2.3 of our preliminary decision details that approach.[5]

The CCP has raised concerns with having both the weighted average cost of capital (WACC) and RAB measured in nominal terms.[6] It appears to question whether inflation is accounted for twice in the building block framework. This matter was addressed in our preliminary decision for Ergon Energy.[7] Maintaining the RAB in real terms by adding inflation is required by the NER[8] and generally helps to promote smoother prices over the life of an asset. The regulatory depreciation building block is adjusted for the inflation indexed component of the RAB so that there is no double counting of inflation. If the RAB was unindexed for inflation, the offsetting indexation adjustment applied to depreciation would also have to be removed. On balance, this means more depreciation would be returned to the business resulting in higher prices early in an asset life and lower prices later in its life.[9] Even if allowed under the NER, moving to an unindexed RAB would lead to a price increase over the short to medium term and when new lumpy assets are added to the RAB.[10]

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5 AER, *Preliminary decision, Ergon Energy determination 2015−16 to 2019−20: Attachment 2 − Regulatory asset base,* April 2015.

6 CCP, Mr Bruce Mountain CCP2, *Advice on AER preliminary decisions and revised proposals from Energex, Ergon Energy and SA Power Networks*, July 2015, pp. 6–7; CCP, Mr Hugh Grant CCP2*, AER preliminary 2015–20 revenue determinations – Energex and Ergon Energy revised revenue proposals*, September 2015, pp. 2, 9–11.

7 AER, *Preliminary decision, Ergon Energy determination 2015−16 to 2019−20: Attachment 2 − Regulatory asset base*, April 2015, section 2.3.1.

8 NER, cl. 6.5.1(e)(3).

9 Such an impact would also be reflected if we were to switch methods midway through an asset's life.

10 The indexation of the RAB was a matter discussed extensively in the AER's final decision on APA GasNet's access arrangement. This matter also went before the Australian Competition Tribunal, who found in favour of the AER's

Several submissions on the preliminary decision raised concerns with the size of Ergon Energy's opening RAB.[11] The submissions suggested that there is 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 Ergon Energy prior to 1 July 2015.[12] Therefore, for the purposes of this final decision, we are required to add Ergon Energy's actual capex from the 2010–15 regulatory control period to the RAB. However, with rule changes in 2012, we will have the ability to exclude inefficient capex incurred during the 2015–20 regulatory control period in future resets if it exceeds the approved forecast and if we consider it does not reasonably reflect the capex criteria.[13] The details of our assessment approach for inefficient capex are set out in the Capital expenditure incentive guideline.[14]

2.4 Reasons for final decision

We do not accept Ergon Energy's revised proposed opening RAB of $10 055.8 million ($ nominal) as at 1 July 2015. We instead determine an opening RAB of $9873.0 million ($ nominal) as at 1 July 2015. This represents a reduction of $182.8 million, or 1.8 per cent from Ergon Energy's revised proposal. Ergon Energy's revised proposal repeated the error in its initial proposal of using incorrect remaining asset lives as at 1 July 2010. Adjustments were also made in relation to actual inflation for 2014–15, capitalised provisions, and removal of other ACS related assets besides meters.

Based on the approved opening RAB we forecast a closing RAB value of $12184 million ($ nominal) by 30 June 2020. This represents a reduction of $605.9 million, or 4.7 per cent compared to the revised proposal. The reasons for our decision are discussed below.

2.4.1 Opening RAB as at 1 July 2015

We have revised the opening RAB as at 1 July 2015 for the following issues:

- Updates to 2014–15 inputs for actual inflation and capex estimates

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reasoning in that final decision. See AER, *Access arrangement final decision, APA GasNet Australia (Operations) Pty Ltd, 2013–17, Part 2: Attachments*, 15 March 2013, pp.102–116.

11 Alliance of Energy Consumers, *Submission to the Australian Energy Regulator's Preliminary Decision (Queensland)*, July 2015, p. 35; Energy Users Association of Australia, *Submission to AER draft determination and Energex's revised revenue proposal 2015 to 2020*, 24 July 2015, p. 11; Queensland Farmers' Federation, *Submission to AER on Ergon Energy Regulatory Proposal Revised 2015-2020*, 24 July 2015, p. 2.

12 NER, cll. 11.60.5 and 11.62.

13 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.

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

- Correction of errors in remaining asset lives at 1 July 2010
- Adjustments for movement in capitalised provisions
- Removal of other ACS assets besides meters.

Each issue is discussed in turn below.

Updates to 2014–15 capex and inflation estimates

Ergon Energy updated its estimate for 2014–15 capex in its revised proposal. We accept these revised estimates that lower the opening RAB as at 1 July 2015 compared to our preliminary decision. We note that the financial impact of any difference between actual and estimated capex for 2014–15 will be accounted for at the next reset.[15]

We have updated the inflation input for 2014–15 from the 2.75 per cent in Ergon Energy's revised proposal to 1.33 per cent using actual March 2015 consumer price index (CPI) published by the Australian Bureau of Statistics.[16] This update lowers the opening RAB as at 1 July 2015 by 1.4 per cent compared to Ergon Energy's revised proposal, and represents about a $137 million reduction in the size of Ergon Energy's RAB in nominal terms.[17]

Remaining asset lives

Ergon Energy's revised proposal submitted the RFM for its opening RAB which repeated the error in its initial proposal of not applying the inputs for remaining asset lives at 1 July 2010 as approved by the AER in the 2010 determination. Ergon Energy did not submit any further information regarding why it did not adopt the corrections as set out in the preliminary decision. Accordingly, we maintain our preliminary decision and have used the approved remaining asset lives in the RFM as required for the proper function of the RAB roll forward process.

The correct remaining asset lives were generally longer than those in Ergon Energy's revised proposed RFM. This means depreciation for 2010–15 is lower than proposed, and Ergon Energy's closing RAB as at 30 June 2015 is consequently higher than proposed, consistent with the preliminary decision.

Capitalised provisions

Ergon Energy's revised proposal adopted our preliminary decision that the movement in capitalised provisions during the 2010–15 regulatory control period should be

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15 NER, cl. S6.2.1(e)(3).

16 The March quarter CPI is used as a proxy for the June financial year in the 2010–15 regulatory control period. As discussed in attachment 14, the December quarter CPI will be used as a proxy for the June financial year for the 2015–20 regulatory control period.

17 We also corrected the input for the 2009–10 forecast inflation rate (cell G179 in the 'Input' tab) to 2.76 per cent from 2.52 per cent. This correction reflects the approved value in the regulatory determination for that period.

removed from capex included in the RAB.[18] However, it failed to do so in its revised RFM. Accordingly, for this final decision we apply the adjustment for the movement in capitalised provisions as shown in table 2.5.[19] The total adjustment for each year is pro-rated across asset classes based on the size of the capex in that asset class for the relevant year. Overall, this adjustment reduces Ergon Energy's proposed opening RAB by about $1.6 million, other things being equal.

Table 2.5 Ergon Energy's movement in capitalised provisions ($million, nominal)

	2010–11	2011–12	2012–13	2013–14	2014–15
Movement in capitalised provisions	–0.1	9.5	–8.1	0.2	0.0

Source: Ergon Energy, *Regulatory proposal* reset *RIN*, February 2015, Table 2.13.1.

Separation of alternative control services and unregulated assets

We do not accept the inclusion in the RAB of 'shared assets'—that is, assets that are used to provide both SCS and ACS. We made an adjustment for this in our preliminary decision. Ergon Energy has not adopted this adjustment in its revised proposal, but has given no further explanation of why it rejected this adjustment. Accordingly, for this final decision we have applied the same adjustment approach as in the preliminary decision. This means $13.8 million of assets have been removed from the RAB as at 1 July 2015.[20] The proportion of the proposed revenue adjustment for shared assets that applies to these assets has also been removed (see attachment 1).

Consistent with the preliminary decision, we have not removed the proportion of shared assets used for other unregulated activities (such as retail services[21]). Instead, these remain in the RAB but a revenue adjustment consistent with the shared asset guideline has been applied, rather than a continuation of the Queensland Competition Authority's previous approach (see attachment 1).

Ergon Energy's revised proposal removed meters from its opening RAB as at 1 July 2015. However, due to the update of actual inflation for 2014–15 noted above, there is a small change to the amount removed from the RAB for meters. We have removed

[18] Ergon Energy, *Revised regulatory proposal*, July 2015, p. 24.

[19] Positive amounts are net increases in capitalised provisions, while negatives mean there has been a net payout by Ergon Energy in capitalised provisions.

[20] This amount is based on Ergon Energy's *Email response to AER Ergon 060*, 23 February 2015. However, the total deducted has been revised slightly to reflect the lower actual inflation input for 2014–15 as discussed above.

[21] Ergon Energy provides retail electricity services in Queensland. Some assets, such as vehicles or computer systems, may be shared between the regulated and unregulated activities, although the proportion of use of shared assets by retail activities is typically less than three per cent.

$60.7 million in meters from the RAB as at 1 July 2015. This is slightly less than the $61.6 million in Ergon Energy's revised proposal due to the inflation difference.[22]

Asset disposals

The CCP raised concerns regarding Ergon Energy's level of disposals and the revisions made to 132kV line lengths in its reporting of regulatory information notices (RIN).[23] The disposals were reviewed as part of the preliminary decision and have not been revised for the final decision.[24] While we understand the CCP's frustration with the revision to regulatory data, the mistakes regarding line lengths included in Ergon Energy's RIN responses resulted from difficulties in merging multiple accounting systems.[25] We note the revised line length data has been audited.

2.4.2 Forecast closing RAB as at 30 June 2020

We forecast a closing RAB value of $12 184.0 million by 30 June 2020 for Ergon Energy. This represents a reduction of $605.9 million, or 4.7 per cent to Ergon Energy's revised proposal. This reduction reflects our final decision on the required inputs for determining the forecast RAB in the post-tax revenue model (PTRM). To determine the forecast RAB value, we have amended the PTRM inputs as a result of the following changes:

- We reduced Ergon Energy's revised proposed forecast capex for the 2015–20 regulatory control period by $500.9 million ($ nominal) or 14.1 per cent (attachment 6).
- We reduced Ergon Energy's revised proposed forecast regulatory depreciation for the 2015–20 regulatory control period by $77.9 million ($ nominal) or 9.4 per cent (attachment 5).
- We reduced Ergon Energy's revised proposed forecast inflation rate of 2.55 per cent per annum to 2.50 per cent per annum (attachment 3).

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22 In terms of allocating this adjustment we have removed the entire value of the legacy meters (those acquired prior to 1 July 2010) and removed the balance from the meters acquired over the 2010–15 regulatory control period.

23 Mr Bruce Mountain CCP2, *Advice on AER preliminary decisions and revised proposals from Energex, Ergon Energy and SA Power Networks*, July 2015, pp. 11–12.

24 AER, *Preliminary decision, Ergon Energy determination 2015−16 to 2019−20: Attachment 2 − Regulatory asset base,* April 2015, section 2.4.

25 Ergon Energy, *Email response to information request 'AER Ergon 074'*, received 21 July 2015.