



Draft decision

Endeavour Energy distribution determination

2015–16 to 2018–19

Attachment 1: Annual revenue requirement

November 2014

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Note

This attachment forms part of the AER's draft decision on Endeavour Energy's 2015–19 distribution determination. It should be read with other parts of the draft decision.

The draft 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 mechanisms

Attachment 15 – Pass through events

Attachment 16 – Alternative control services

Attachment 17 – Negotiated services framework and criteria

Attachment 18 – Connection policy

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Shortened forms

Shortened form	Extended form
AARR	aggregate annual revenue requirement
AEMC	Australian Energy Market Commission
AEMO	Australian Energy Market Operator
AER	Australian Energy Regulator
ASRR	aggregate service revenue requirement
augex	augmentation expenditure
capex	capital expenditure
CCP	Consumer Challenge Panel
CESS	capital expenditure sharing scheme
CPI	consumer price index
CPI-X	consumer price index minus X
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

Shortened form	Extended form
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 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

1 Annual revenue requirement

The annual revenue requirement (ARR) is the amount that Endeavour Energy can recover from the provision of standard control services for each year of the regulatory control period. It is the sum of the various building block costs for each year of that period before smoothing. The ARR is smoothed across the period to reduce fluctuations between years and to determine expected revenues for each year. These expected revenues are the amounts that Endeavour Energy will target for annual pricing purposes. This attachment sets out our draft decision on Endeavour Energy's ARRs for the 2014–19 period and expected revenues for the 2015–19 regulatory control period.

1.1 Draft decision

We do not accept Endeavour Energy's proposed total revenue requirement¹ of \$5255.7 million (\$ nominal) over the 2014–19 period. For the reasons discussed in the attachments to this draft determination, our decisions on Endeavour Energy's proposed building block costs have a consequential impact on its ARR. We determine a total revenue requirement for Endeavour Energy of \$4015.6 million (\$ nominal) for the 2014–19 period. This is a reduction of \$1240.0 million (\$ nominal) or 23.6 per cent to Endeavour Energy's proposal and reflects the impact of our draft decisions on the various building block costs.

To account for the placeholder revenue (\$939.9 million) for 2014–15 that we approved in our transitional determination, we have calculated the difference to be adjusted between the placeholder revenue and our ARR (\$836.5 million) for 2014–15. Our draft decision is that this adjustment amounts to \$103.4 million. We have applied this adjustment as part of the smoothing process to establish the annual expected revenue for the 2015–19 regulatory control period.

As a result of our smoothing of the ARRs, our draft decision on the annual expected revenue and X factor for each regulatory year of the 2015–19 regulatory control period is set out in Table 1.1. Our draft decision is to approve total expected revenues (smoothed) of \$3056.8 million (\$ nominal) for the 2015–19 regulatory control period.²

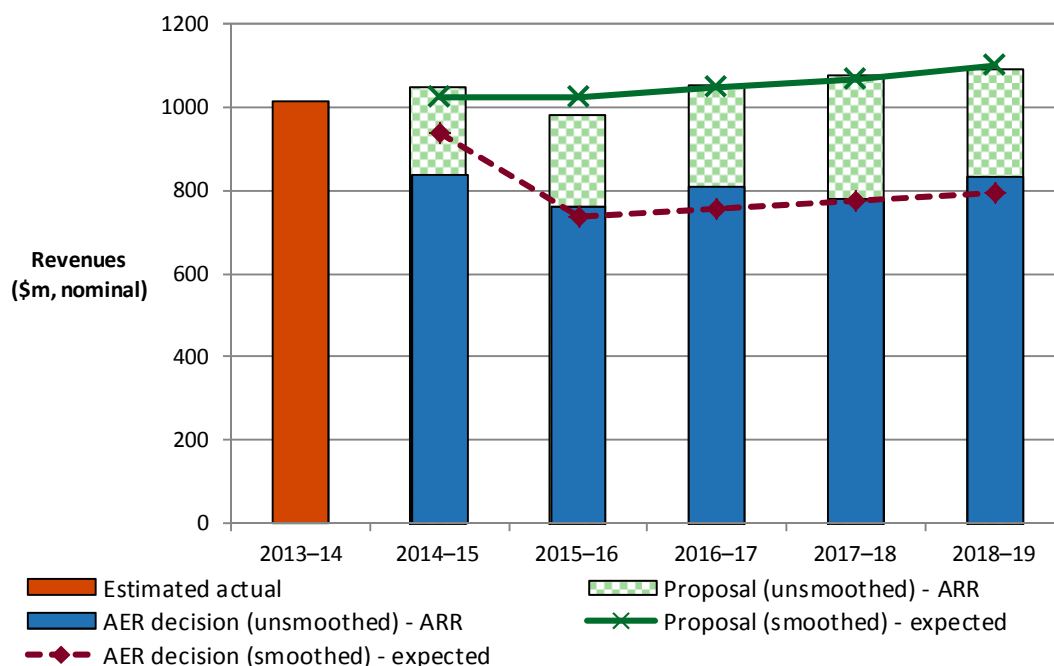
Figure 1.1 shows the difference between Endeavour Energy's proposal and our draft decision.

Table 1.1 shows our draft decision on the building block costs and the calculation of the ARR, annual expected revenue and X factor for each year of the 2014–19 period.

¹ This is referred to in the transitional rules as a 'notional' revenue requirement. We have adopted the standard terminology in chapter 6 to avoid confusion, but it still gives effect to the transitional rules.

² Our smoothing involves a 'true-up' for the 2014–15 (transitional regulatory control period) placeholder revenue as required under clauses 11.56.4(h) and (i) of the NER.

Figure 1.1 AER's draft decision on Endeavour Energy's revenues for the 2014–19 period (\$million, nominal)



Source: Endeavour Energy, *Regulatory proposal*, May 2014, Attachment 4.02.
AER analysis.

Table 1.1 AER's draft decision on Endeavour Energy's revenues for the 2014–19 period (\$million, nominal)

	2014–15	2015–16	2016–17	2017–18	2018–19	Total
Return on capital	400.1	416.5	427.9	436.1	445.1	2125.7
Regulatory depreciation	63.4	73.0	83.3	87.8	92.8	400.2
Operating expenditure	212.1	220.5	230.1	240.5	251.7	1155.0
Efficiency benefit sharing scheme (carryover amounts)	81.3	12.6	26.9	–25.2	0.0	95.5
Net tax allowance	35.6	36.7	40.8	40.7	41.3	195.1
Metering and ANS net costs ^a	44.1	n/a	n/a	n/a	n/a	44.1
Annual revenue requirement (unsmoothed)	836.5	759.4	809.0	779.9	830.9	4015.7
Annual expected revenue (smoothed)	939.9	736.1	754.5	773.4	792.7	3996.6
X factor	n/ab	23.59%	0.00% ^c	0.00% ^c	0.00% ^c	n/a

Source: AER analysis.

(a) These are the efficient net costs of metering and ancillary network services as determined by the AER. They reflect the difference between the costs and any offsetting revenues recovered by the service provider through separate charges.

(b) In our transitional decision, we determined the placeholder revenue for 2014–15. In this draft decision to update the 2014–15 revenue for our assessment of efficient costs we determined X factors for the final four years of the 2014–19 period. This is to adjust Endeavour Energy's total revenue requirement for the 2015–19 regulatory control period for the difference between the placeholder revenue and our decision on Endeavour Energy's efficient costs for 2014–15.

(c) The X factor will be revised to reflect the annual return on debt update.

1.2 Endeavour Energy's proposal

Endeavour Energy proposed a total revenue requirement of \$5255.7 million (\$ nominal) for the 2014–19 period.

Table 1.2 shows Endeavour Energy's proposed building block costs and the calculation of the ARRs, and expected revenues for each year of the 2014–19 period.

Table 1.2 Endeavour Energy's proposed revenues for the 2014–19 period (\$million, nominal)

	2014–15	2015–16	2016–17	2017–18	2018–19	Total
Return on capital	494.0	528.4	555.8	578.8	603.3	2760.3
Regulatory depreciation ^a	62.6	72.3	83.1	88.1	93.3	399.6
Operating expenditure	274.2	286.2	302.8	307.7	321.8	1492.7
Efficiency benefit sharing scheme (carryover amounts)	97.5	33.3	42.3	34.2	0.0	207.3
Net tax allowance	59.9	62.7	69.2	70.1	71.9	333.8
Meters and ANS	62.1	n/a	n/a	n/a	n/a	62.1
Annual revenue requirement (unsmoothed)	1050.3	982.9	1053.2	1078.9	1090.4	5255.7
Annual expected revenue (smoothed)^b	1021.7	1021.6	1046.1	1067.9	1101.1	5258.3
X factor	1.80%	2.45%	0.11%	0.40%	–0.59%	n/a

Source: Endeavour Energy, *Regulatory proposal*, May 2014, Attachment 4.02.

(a) Regulatory depreciation is straight-line depreciation net of the inflation indexation on the opening RAB.

(b) Endeavour Energy did not make a true-up adjustment to account for the transitional determination. Therefore, these are expected revenues before the 2014–15 placeholder revenue true-up discussed in section 1.4.1.

1.3 AER's assessment approach

We are required to determine the ARR for Endeavour Energy for each regulatory year of the 2014–19 period.³ The process for determining Endeavour Energy's total revenue requirement for the 2014–19 period is affected by the transitional rules that apply to this determination. We previously approved an amount of \$939.9 million as the placeholder revenue for 2014–15 for Endeavour Energy,⁴ until a full assessment of costs for the 2014–15 year could be carried out in the current determination.

In this determination we first calculate ARRs for each year of the 2014–19 period, including the 2014–15 transitional year. To do this we consider the various costs facing the service provider and the trade-offs and interactions between these costs, service quality and across years. This reflects the AER's holistic assessment of the service provider's proposal.

The ARR for each year is the sum of the building block costs. These building block costs are set out in section 1.3.1. The AER's post-tax revenue model (PTRM) brings together these building block costs and calculates the resulting ARRs.

³ NER, cl 6.3.2(a)(1) and cl 11.56.4(c).

⁴ See NER cl.11.56.4 and Endeavour Energy's placeholder determination for the transitional regulatory control period of 2014–15.

We understand the trade-offs that occur between building block costs and test the sensitivity of these costs to their various driver elements. These trade-offs are discussed in the interrelationships section of the various attachments to this draft decision and are reflected in the calculations made in the PTRM developed by the AER.⁵ Such understanding allows the AER to exercise judgement in determining the final inputs into the PTRM and the ARR that result from this modelling.

The difference between the ARR we determine for 2014–15 and our previously determined placeholder revenue gives rise to the required true-up adjustment amount under the transitional rules.⁶ The true-up adjustment amount is applied as part of smoothing the ARRs to establish the annual expected revenue for each year of the 2015–19 regulatory control period.

Having determined the total revenue requirement for the 2014–19 period, the ARRs for each regulatory year are smoothed across the 2015–19 regulatory control period to reduce revenue variations between years and to come up with the expected revenue for each year.⁷ This is done through the determination of the X factors and the application of our true-up adjustment.⁸ The X factor must equalise (in net present value terms) the total expected revenues to be earned by the service provider with the total revenue requirement for the 2014–19 period.⁹ The X factor must usually minimise, as far as reasonably possible, the variance between the expected revenue and ARR for the last regulatory year of the period.¹⁰

For this draft decision, the expected revenue in the last year of the regulatory control period are not required to be as close as reasonably possible to the ARR for that year, due to the transitional provisions.¹¹ Typically, we would target a divergence of less than 3 per cent between the expected revenue and ARR for the last year of the regulatory control period, if this can promote smoother price changes over the regulatory control period. However, due to the shortened regulatory control period and the required true-up for 2014–15,¹² we have allowed the divergence in the final year revenues to exceed 3 per cent in certain cases. This helps minimise the prospect of a significant price decrease followed by significant price increases over the 2015–19 regulatory control period. We will review the smoothing for the final decision if necessary.

The building block costs (and the elements that drive those costs) used to determine the unsmoothed ARR are set out below.

1.3.1 The building block costs

The efficient costs to be recovered by a service provider can be thought of as being made up of various building block costs. Our draft decision assesses each of the building block costs and the elements that drive these costs. The building block costs are approved reflecting trade-offs and

⁵ There are trade-offs that are not modelled in the PTRM but are reflected in the inputs to the PTRM. For example, service quality is not explicitly modelled in the PTRM, but the trade-offs between service quality and price are reflected in the forecast capex and opex inputs to the model. Other trade-offs are obvious from the calculations in the PTRM. For example, while someone may expect a lower regulatory asset base to also lower revenues, the PTRM shows that this will not occur if the reduction in the regulatory asset base is due solely to an increase in the depreciation rate. In such circumstances, revenues increase as the increased depreciation allowance more than offsets the reduction in the return on capital caused by the lower regulatory asset base.

⁶ NER, cl 11.56.4(h)-(j).

⁷ For the purposes of operating the PTRM, the placeholder revenue is set as the smoothed expected revenue for 2014–15.

⁸ NER, cl 6.5.9(a).

⁹ NER, cl 6.5.9(3)(i).

¹⁰ NER, cl 6.5.9(b)(2).

¹¹ NER, cl 11.56.4(c).

¹² The placeholder revenue for 2014–15 is significantly higher than the amount in this draft decision. The relatively small decrease to 2014–15 prices means even larger decreases are needed over the following years. Given the shortened regulatory control period, accounting for this true-up, as well as the revenue reductions in the remaining years, makes smoothing prices more challenging.

interactions between the cost elements, service quality and across years. Table 1.3 the building block costs that form the ARR for each year and where discussion on the elements that drive these costs can be found within this draft decision.

Table 1.3 Building block costs

Building block costs	Attachments where elements are discussed
Return on capital	Regulatory asset base (attachment 2) Capex (attachment 6) Rate of return (attachment 3)
Regulatory depreciation (return of capital)	Regulatory asset base (attachment 2) Capex (attachment 6) Depreciation (attachment 5)
Operating expenditure (opex)	Opex (attachment 7)
Efficiency benefits/penalties	Efficiency benefit sharing scheme (attachment 9)
Estimated cost of corporate tax	Corporate income tax (attachment 8) Value of imputation credits (attachment 4)

1.3.2 Placeholder revenue true-up for 2014–15

The five regulatory years from 2014–19 are split over two regulatory control periods due to the transitional rules.¹³ There is a 'transitional regulatory control period' for 2014–15, and a 'subsequent regulatory control period' for 2015–19. We are required to make both a decision on the transitional placeholder revenue for 2014–15 and then a decision on the revenues for the full 2014–19 period.

In April 2014, as required under the transitional rules, we conducted a high level review of Endeavour Energy's proposed revenue requirement for its transitional regulatory control period (2014–15). We determined a placeholder revenue allowance of \$939.9 million (\$ nominal)¹⁴ for Endeavour Energy in the transitional determination.¹⁵

In this draft decision, we make a full regulatory determination for the years 2015–16 to 2018–19 for Endeavour Energy, and we account for any true-up related to the transitional regulatory control period (2014–15). As part of this, we are required to determine ARRs for each year of the five year period (2014–19) and use a net present value (NPV) neutral true-up mechanism to account for any difference between:¹⁶

- the placeholder revenue for the transitional regulatory control period, and
- the ARR for 2014–15 that is established through the full determination process.

¹³ NER, cl 11.56.3-4.

¹⁴ AER, *Ausgrid Endeavour Energy Essential Energy ActewAGL, Transitional distribution decision 2014–15*, April 2014, p. 17.

¹⁵ This amount included the net costs for metering, ancillary network services and emergency recoverable works. Although these services became alternative control services from 1 July 2014, the costs associated with these services were to be recovered via standard control services for 2014–15. For the draft decision the ANS costs from the placeholder decision for 2014–15 have been used. The actual costs for these services will be determined as part of the final decision.

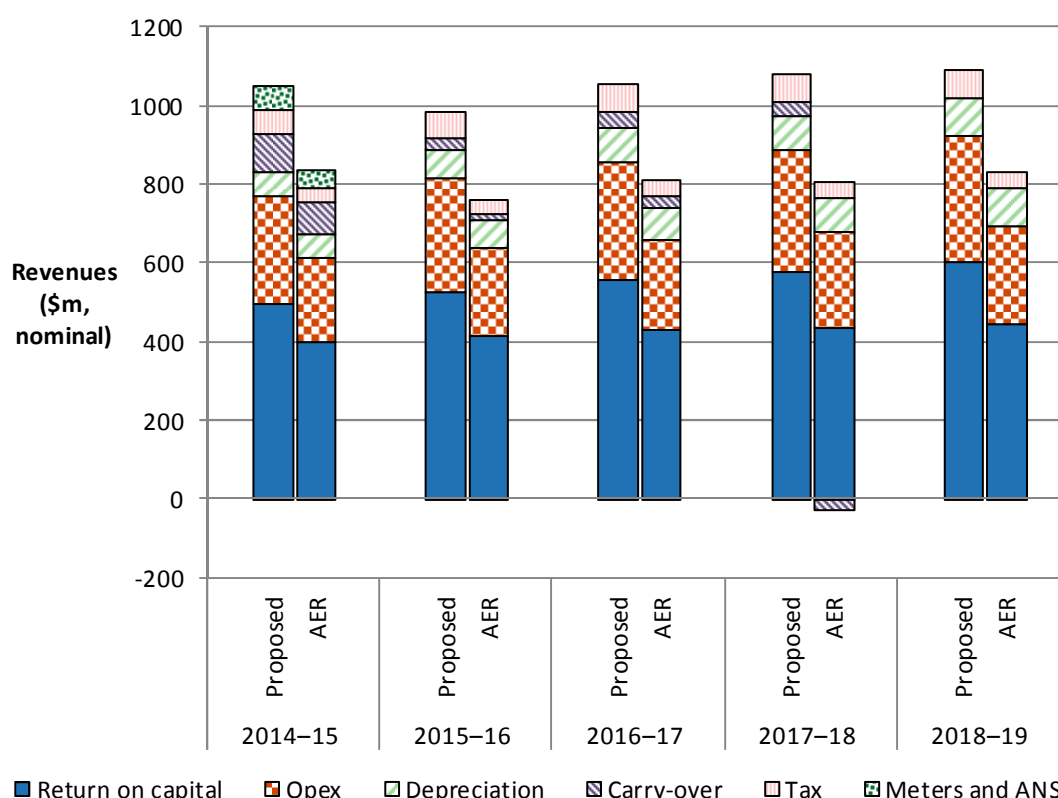
¹⁶ NER, cl 11.56.4(h)-(i).

Our draft decision on the 2014–15 ARR for Endeavour Energy is \$836.5million. This means there is a difference in costs recovered in 2014–15 that must be returned to customers. To give effect to the true-up, we have set Endeavour Energy's first year expected revenue in the PTRM equal to the AER approved placeholder revenue for 2014–15 of \$939.9 million. This is the only practical option as prices were set for 2014–15 based on this approved placeholder amount. However, this practicality also means that the difference in the revenues for 2014–15 between the transitional and full determinations will need to be accounted for in the 2015–19 regulatory control period. That is, the placeholder revenue for 2014–15 established from the transitional determination provides a base from which the expected revenues (smoothed) for the remaining four years of the 2014–19 period are calculated through the determination of the X factors for these years. This gives effect to the true-up requirements under the NER and ensures that the difference of \$103.4million is returned to customers over the 2015–19 subsequent regulatory control period (adjusted for the time value of money). The details of this true-up for Endeavour Energy is discussed further in section 1.4.1.

1.4 Reasons for draft decision

We determine a total revenue requirement of \$4015.6 million (\$ nominal) for Endeavour Energy over the 2014–19 period. This is \$1240.0 million (\$ nominal) or 23.6 per cent below Endeavour Energy's proposal and reflects the impact of our draft decision on the various building block costs. Figure 1.2 shows the difference between Endeavour Energy's proposed ARR and our draft decision.

Figure 1.2 AER's draft decision and Endeavour Energy's proposed annual revenue requirement (\$million, nominal)



Source: Endeavour Energy, *Regulatory proposal*, May 2014, Attachment 4.02. AER analysis.

The most significant changes to Endeavour Energy's proposal include: a reduction to the rate of return of 1.7 per cent (attachment 3), a reduction in the capex allowance of 39.9 per cent (attachment 6), and a reduction in the opex allowance of 22.6 per cent (attachment 7).

1.4.1 Revenue adjustment for transitional year

We consider that an adjustment needs to be made to the presentation of Endeavour Energy's proposal. This adjustment is to use the placeholder revenue for the 2014–15 transitional regulatory control period as a base from which to smooth the proposed expected revenues over the 2014–19 period. This is to take account of the difference between the placeholder revenue and the ARR determined for 2014–15 in this decision.

In its transitional regulatory proposal, Endeavour Energy proposed an ARR of \$997.6 million (\$ nominal)¹⁷ related to DUOS revenue.¹⁸ We approved the placeholder revenue for 2014–15 of \$939.9 million.¹⁹ Table 1.4 shows the proposed and approved placeholder revenue for the 2014–15 transitional regulatory control period. The revenue includes all costs associated with standard control services, including type 5 and 6 metering services and ancillary network services (ANS) which were re-classified from standard control services to alternative control services as at 1 July 2014. The transitional rules²⁰ prevented the reallocation of type 5 and 6 and ANS costs in 2014–15 despite the change in classification from standard control services to alternative control services as at 1 July 2014.²¹

Table 1.4 Endeavour Energy's proposed transitional placeholder revenue and AER transitional determination for 2014–15 (\$ million, nominal)

	2013–14	2014–15
Endeavour Energy transitional proposal	1015.0	997.6
Change in revenues		–1.7%
AER transitional determination	1015.0	939.9
Change in revenues		–7.4%

Source: Endeavour Energy, *Transitional regulatory proposal*, January 2014, Attachment A1.
AER, *Ausgrid, Endeavour Energy, Essential Energy, ActewAGL, Transitional distribution decision 2014–15*, April 2014, p. 17.
AER analysis.

We consider that the 2014–15 placeholder revenue of \$939.9 million (\$ nominal) provides the appropriate base against which Endeavour Energy's proposal and our draft decision can be compared. To do otherwise would be to effectively ignore the 2014–15 transitional determination and the price impacts it has had for 2014–15 as part of the true-up requirement. Because Endeavour Energy has not accounted for this lower approved placeholder revenue for 2014–15 in its proposal, we have recalculated Endeavour Energy's smoothed expected revenues. We have done this recalculation by adjusting Endeavour Energy's proposed X factor for 2015–16 (the other years' X factors are as proposed), to ensure NPV neutrality between these adjusted smoothed proposal revenues and the unadjusted smoothed proposal revenues. This recalculation is required to allow

¹⁷ Endeavour Energy, *Transitional regulatory proposal*, January 2014, Attachment A1.

¹⁸ The remaining balance (\$9.6 million) reflects revenues arising from ancillary network services not recovered from DUOS.
¹⁹ AER, *Ausgrid, Endeavour Energy, Essential Energy, ActewAGL, Transitional distribution decision 2014–15*, April 2014, pp. 26–29.

²⁰ NER, cl 11.55.3(i).

²¹ AER, *Stage 2 Framework and Approach – NSW Distributors*, January 2014, p. 40.

Endeavour Energy's proposal to be comparable with our draft decision, which accounts for the true-up.

Based on the building block costs determined in this decision and taking account of the need to do the true-up for Endeavour Energy when smoothing the expected revenues over the 2015–19 regulatory control period, we first set the expected revenue for the first regulatory year (2014–15) at \$939.9 million (\$ nominal). This is equal to the placeholder revenue for 2014–15 and is \$103.4 million higher than the 2014–15 ARR (unsmoothed) we have now determined. We then applied a profile of X factors to determine the expected revenue in subsequent years. This difference represents the amount to be returned to customers over the 2015–19 regulatory control period. This is achieved as part of the smoothing process to determine the appropriate X factors for the 2015–19 regulatory control period.²²

We consider that our profile of X factors results in an expected revenue in the last year of the regulatory control period that is as close as reasonably possible to the ARR for that year, given the shortened regulatory control period and the required true-up for 2014–15. In the present circumstances, based on the X factors we have determined for Endeavour Energy, the difference between the expected revenue and ARR for 2018–19 is around 4.6 per cent. While that divergence is significant, it avoids the situation of a larger price decrease in 2015–16 followed by significant price increases for the remaining three years of the regulatory control period. We will review this smoothing for the final decision if necessary. Table 1.5 shows the adjusted expected revenues (smoothed) of Endeavour Energy's proposal and our draft decision expected revenues (smoothed). Both use the 2014–15 placeholder revenue as a base to account for the proposed/determined true-ups.

Table 1.5 Endeavour Energy's adjusted and AER's draft decision smoothed expected revenues for the 2014–19 period (\$ million, nominal)

	2014–15	2015–16	2016–17	2017–18	2018–19
Endeavour Energy's adjusted proposal	939.9	1046.0	1071.0	1093.3	1127.3
X factor	n/a	–8.57%	0.11%	0.40%	–0.59%
AER draft decision	939.9	736.1	754.5	773.4	792.7
X factor	n/a	23.59%	0.00%	0.00%	0.00%

Source: Endeavour Energy, *Regulatory proposal*, June 2014, Attachment 4.02.
AER analysis.

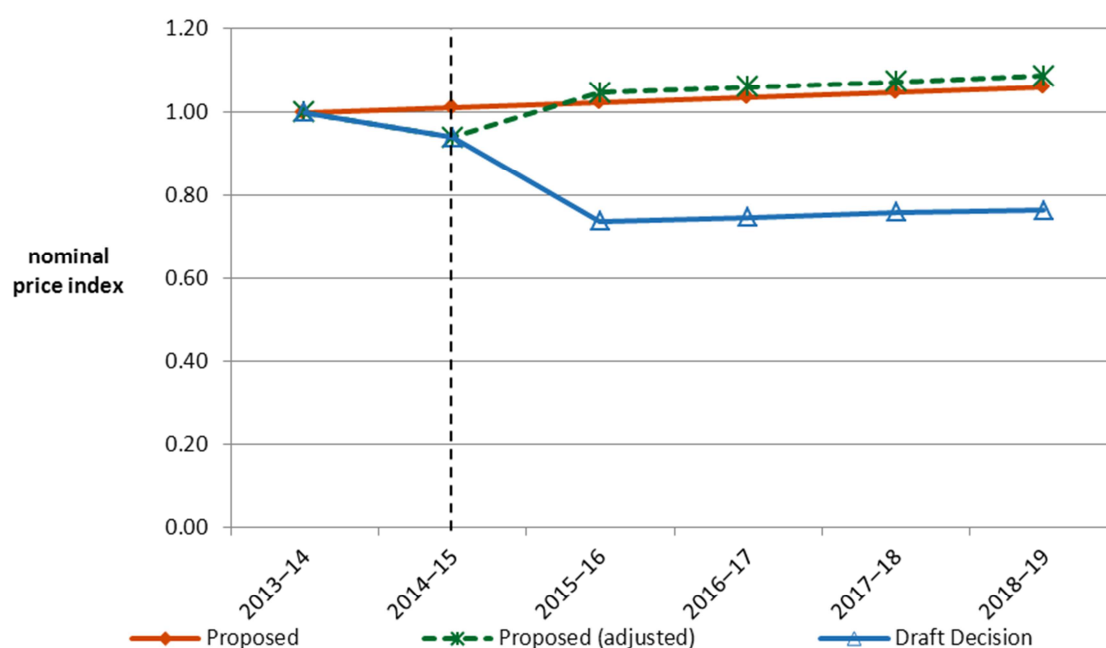
1.4.2 Indicative average distribution price impact

Our draft decision on Endeavour Energy's expected revenues ultimately affects the prices consumers pay for electricity. Because we are regulating Endeavour Energy's standard control services under a revenue cap, the adjustments that we have made to Endeavour Energy's expected revenues do not directly translate to price impacts. This is because Endeavour Energy's revenue is fixed under the revenue cap form of control, so changes in the consumption of electricity will affect the prices ultimately charged to consumers. We are not required to establish the distribution prices for Endeavour Energy as part of this determination. However, we will assess Endeavour Energy's annual pricing proposals before the commencement of the remaining regulatory years for the 2014–19 period based on this distribution determination.

²² This also accounts for the time value of money.

For this draft decision, we have estimated some indicative average distribution price impacts flowing from our determination on the expected revenues for Endeavour Energy over the 2014–19 period. Figure 1.3 shows Endeavour Energy's indicative price path based on the expected revenues established in our draft decision compared to its proposed revenue requirement. We used the price cap calculations Endeavour Energy provided (in addition to its revenue cap calculations) in its PTRM to determine the movement in overall prices. For presentational purposes, the prices are scaled so that the price index begins at 1.0 in 2013–14. This index provides a simple overall measure of the relative movement in expected distribution prices over the 2014–19 period.

Figure 1.3 AER's draft decision and Endeavour Energy's proposed indicative price path (nominal price index)



Source: AER analysis.

Notes: The nominal price index is calculated by the AER based on the indicative weighted average price changes and the demand forecasts submitted by Endeavour Energy in its proposed PTRM, and adjusting for the change in overall revenue substituted by the AER.

We estimate that our draft decision on Endeavour Energy's annual expected revenue will result in a decrease to average distribution charges by about 5.2 per cent per annum over the 2014–19 period in nominal terms.²³ Our transitional determination resulted in an expected reduction in distribution charges of about 6.0 per cent in 2014–15. We estimate that our draft decision will further reduce distribution charges by another 21.5 per cent in 2015–16. Following this, prices will increase by 1.3 per cent in 2016–17, 1.6 per cent in 2017–18, and 0.6 per cent in 2018–19. This compares to the nominal average increase of approximately 3.7 per cent per annum proposed by Endeavour Energy over the 2015–19 regulatory control period.

Table 1.6 displays the comparison of the price impacts of Endeavour Energy's proposal and our draft decision revenue allowance.

²³ This amount includes a forecast inflation rate of 2.5 per cent per annum. In real terms we estimate average distribution charges to decline by 7.1 per cent per annum, compared to a decline of 0.6 per cent per annum proposed by Endeavour Energy.

Table 1.6 Comparison of revenue and price impacts of Endeavour Energy's adjusted proposal and the AER's draft decision

	2013–14	2014–15	2015–16	2016–17	2017–18	2018–19
Endeavour Energy proposal						
Revenue (\$m, nominal) ^a	1015.0	939.9	1046.0	1071.0	1093.3	1127.3
Price path (nominal index)	1.00	0.94	1.05	1.06	1.07	1.09
Revenue (change %)		-7.4%	11.3%	2.4%	2.1%	3.1%
Price path (change %)		-6.0%	11.6%	1.2%	1.2%	1.2%
AER draft decision						
Revenue (\$m, nominal)	1015.0	939.9	736.1	754.5	773.4	792.7
Price path (nominal index)	1.00	0.94	0.74	0.75	0.76	0.76
Revenue (change %)		-7.4%	-21.7%	2.5%	2.5%	2.5%
Price path (change %)		-6.0%	-21.5%	1.3%	1.6%	0.6%

Source: AER analysis.

(a) This represents the expected revenues adjusted for the 2014–15 true-up discussed in section 1.4.1.

Distribution charges represent approximately 39 per cent on average of Endeavour Energy's typical customer's annual electricity bill.²⁴ We expect that our draft decision, other things being equal, will reduce the average annual electricity bills for residential customers in Endeavour Energy's network. This is because we estimate that our draft decision will result in lower distribution charges on average over the 2014–19 period compared to Endeavour Energy's proposal as discussed above. If the lower distribution charges from our transitional determination were passed through to customers, we estimate the average annual electricity bill for Endeavour Energy's residential customers could be expected to reduce by about \$48 or 2.3 per cent (\$ nominal) in 2014–15. If the distribution charges from our draft decision are passed through to customers, we would expect the average annual electricity bill for residential customers to reduce by a further \$159 or 8.1 per cent in 2015–16. This would be followed by increases of between \$4 and \$10 (0.2 per cent and 0.5 per cent) per annum from 2016–17 to 2018–19. In comparison, if we accepted Endeavour Energy's proposal, the average annual electricity bill for residential customers would increase by approximately \$29 or 1.2 per cent (\$ nominal) per annum over the 2015–19 regulatory control period.

Our estimated potential impact is based on the typical annual electricity usage of 6500 kWh per annum for a residential customer in NSW.²⁵ Customers with different usage will experience different changes in their bills. We also note that there are other factors, such as transmission network costs, wholesale and retail costs, which affect electricity bills.

Similarly, for an average small business customer in NSW that uses approximately 10 MWh of electricity per annum, our draft decision for Endeavour Energy is expected to lead to lower average annual electricity bills. We estimate that if the lower distribution charges arising from our transitional determination were passed through to customers, the average annual electricity bill for small business customers in Endeavour Energy's network could be expected to reduce by about \$68 or 2.3 per cent (\$ nominal) in 2014–15. If our distribution charges from our draft decision are passed through to

²⁴ Endeavour Energy, *Regulatory proposal*, June 2014, p. 1.

²⁵ IPART, *Final report: Review of regulated retail prices for Electricity from 1 July 2013 to 30 June 2016*, June 2013, p. 5.

customers, we would expect the average annual electricity bills for small business customers to reduce by a further \$229 or 8.1 per cent in 2015–16. This would be followed by increases of between \$5 and \$14 (0.2 per cent and 0.5 per cent) per annum from 2016–17 to 2018–19. In comparison, if we accepted Endeavour Energy's proposal, the average annual electricity bill for small business customers would increase by approximately \$42 or 1.2 per cent (\$ nominal) per annum over the 2015–19 regulatory control period.

Table 1.7 shows the estimated average annual impact of our draft decision for the 2014–19 period and Endeavour Energy's proposal on the average residential and small business customers' annual electricity bills.

Table 1.7 Estimated impact of Endeavour Energy's adjusted proposal and the AER's draft decision on annual electricity bills for the 2014–19 period (\$ nominal)

	2013–14	2014–15	2015–16	2016–17	2017–18	2018–19
Endeavour Energy proposal						
Residential annual bill ^a	2026	1978 ^c	2065	2075	2085	2095
Annual change		–48 (–2.3%)	86 (4.4%)	10 (0.5%)	10 (0.5%)	10 (0.5%)
Small business annual bill ^b	2909	2841 ^c	2964	2979	2994	3008
Annual change		–68 (–2.3%)	124 (4.4%)	15 (0.5%)	15 (0.5%)	15 (0.5%)
AER draft decision						
Residential annual bill ^a	2026	1978	1819	1827	1836	1840
Annual change		–48 (–2.3%)	–159 (–8.1%)	8 (0.4%)	10 (0.5%)	4 (0.2%)
Small business annual bill ^b	2909	2841	2612	2623	2637	2642
Annual change		–68 (–2.3%)	–229 (–8.1%)	11 (0.4%)	14 (0.5%)	5 (0.2%)

Source: AER analysis; AER, [Energy Made Easy](#); IPART, *Final report: Review of regulated retail prices for electricity - from 1 July 2013 to 30 June 2016*, June 2013, p. 5.

- (a) Based on the annual bill for a typical consumption of 6500 kWh per year during the period 1 July 2013 to 30 June 2014. The bills reflect regulated price only. Sample postcode: 2500.
- (b) Based on the annual bill sourced from Energy Made Easy for a typical consumption of 10000 kWh per year during the period 1 July 2013 to 30 June 2014. The bills reflect regulated price only. Sample postcode: 2500.
- (c) Proposal bills for 2014–15 reflect our adjustment for the 2014–15 true-up discussed in section 1.4.1

1.4.3 Shared assets

Service providers, such as Endeavour Energy, may use assets to provide both standard control services which we regulate and unregulated services. These assets are called 'shared assets'.²⁶ Of the unregulated revenues a service provider earns from shared assets, 10 per cent will be used to reduce the service provider's prices for standard control services.²⁷ However, price reductions are subject to a materiality threshold. Unregulated use of shared assets is material when a service provider's unregulated revenues from shared assets in a specific regulatory year are expected to be greater than 1 per cent of its total expected revenue for that regulatory year.²⁸

²⁶ NER, cl. 6.4.4.

²⁷ AER, *Shared asset guideline*, November 2013.

²⁸ AER, *Shared asset guideline*, November 2013, p. 8.

Endeavour Energy submitted that its shared asset unregulated revenues are forecast to be between 0.54 and 0.59 per cent of its expected revenue in each regulatory year of the 2014–19 period.²⁹ Based on our previous assessment of service provider unregulated revenues, we consider Endeavour Energy's forecasts are reasonable.³⁰ However, Endeavour Energy's forecast unregulated revenues must be compared to the expected revenues (regulated) we determine, rather than those proposed by Endeavour Energy. On that basis, we consider Endeavour Energy's unregulated revenues are between 0.59 and 0.83 per cent of its total expected revenue in each regulatory year of the 2014–19 period.

We note that unregulated revenues from shared assets may in future become material. We will monitor Endeavour Energy's shared asset unregulated revenues and, if necessary, determine our own forecasts for future regulatory control periods.

²⁹ Endeavour Energy, *Regulatory proposal*, May 2014, p. 37.

³⁰ Undertaken as we developed our shared asset guideline, during the 2013 calendar year, as part of our Better Regulation work program.