



**Draft decision**

**Essential 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 Essential 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 mechanism

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 requirements

The annual revenue requirement (ARR) is the amount that Essential 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 Essential Energy will target for annual pricing purposes. This attachment sets out our draft decision on Essential 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 Essential Energy's proposed total revenue requirement<sup>1</sup> of \$6823.9 million (\$ nominal) over the 2014–19 period. For the reasons discussed in the attachments to this draft determination, our decisions on Essential Energy's proposed building block costs have a consequential impact on its ARR. We determine a total revenue requirement for Essential Energy of \$5038.5 million (\$ nominal) for the 2014–19 period. This is a reduction of \$1785.4 million (\$ nominal) or 26.2 per cent to Essential Energy's proposal and reflects the impact of our draft decisions on the various building block costs.

To account for the placeholder revenue (\$1291.7 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 (\$952.9 million) for 2014–15. Our draft decision is that this adjustment amounts to \$338.9 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 \$3678.6 million (\$ nominal) for the 2015–19 period.<sup>2</sup>

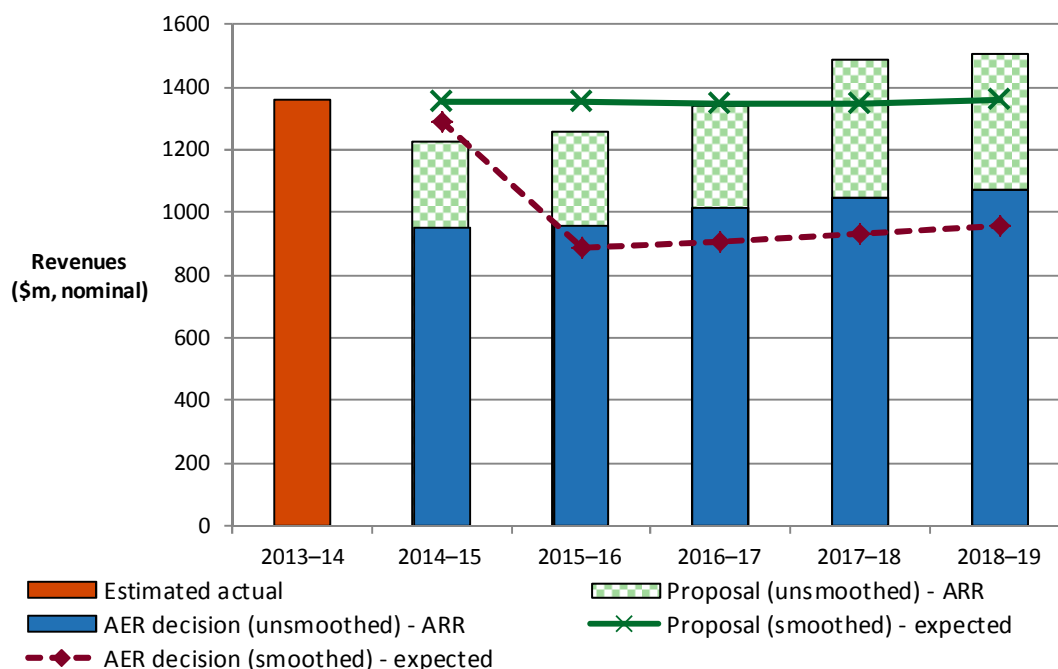
Figure 1-1 shows the difference between Essential Energy's proposal and our draft decision.

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

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

**Figure 1-1 AER's draft decision on Essential Energy's revenues for the 2014–19 period (\$million, nominal)**



Source: Essential Energy, *Regulatory proposal*, May 2014, Attachment 4.1. AER analysis.

Table 1-1 shows our draft decision on the building block costs and the calculation of the ARR for each year of the 2014–19 period.

**Table 1-1 AER's draft decision on Essential Energy's annual revenue requirement for the 2014–19 period (\$million, nominal)**

	2014-15	2015-16	2016-17	2017-18	2018-19	Total
Return on capital	477.7	502.0	522.6	542.8	562.1	2607.2
Regulatory depreciation	98.6	116.6	132.0	136.1	129.8	613.2
Operating expenditure	288.3	298.4	309.6	321.7	334.1	1552.1
Efficiency benefit sharing scheme (carryover amounts)	0.0	0.0	0.0	0.0	0.0	0.0
Net tax allowance	40.1	38.1	47.1	46.7	46.0	217.9
Metering, ANS & ERW net costs <sup>a</sup>	48.1	n/a	n/a	n/a	n/a	48.1
Annual revenue requirement (unsmoothed)	952.9	955.1	1011.3	1047.2	1072.0	5038.5
<b>Annual expected revenue (smoothed)</b>	<b>1291.7</b>	<b>885.9</b>	<b>908.0</b>	<b>930.7</b>	<b>954.0</b>	<b>4970.3</b>
X factor	n/a <sup>b</sup>	33.09%	0.00% <sup>c</sup>	0.00% <sup>c</sup>	0.00% <sup>c</sup>	n/a

Source: AER analysis.

- (a) These are the efficient net costs of metering and ancillary network services and emergency recoverable works 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 Essential Energy's total revenue requirement for the 2015–19 regulatory control



period for the difference between the placeholder revenue and our decision on Essential Energy's efficient costs for 2014–15.

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

## 1.2 Essential Energy's proposal

Essential Energy proposed a total revenue requirement of \$6823.9 million (\$ nominal) for the 2014–19 period.

Table 1-2 shows Essential 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 Essential 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	598.0	639.8	678.4	717.5	756.2	3 389.8
Regulatory depreciation <sup>a</sup>	98.4	116.3	131.7	135.9	129.8	612.1
Operating expenditure	475.3	488.6	496.7	516.0	539.6	2 516.2
Efficiency benefit sharing scheme (carryover amounts)	-14.9	-52.7	-48.3	39.1	0.0	-76.8
Net tax allowance	69.2	68.0	81.1	82.0	82.4	382.7
Annual revenue requirement (unsmoothed)	1225.9	1260.0	1339.6	1490.4	1508.0	6823.9
<b>Annual expected revenue (smoothed)<sup>b</sup></b>	<b>1352.6</b>	<b>1352.2</b>	<b>1348.1</b>	<b>1347.5</b>	<b>1356.9</b>	<b>6757.2</b>
X factor	3.44%	2.47%	2.74%	2.48%	1.76%	n/a

Source: Essential Energy, *Regulatory proposal*, May 2014, Attachment 4.1.

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

(b) These revenues are expected revenues before the 2014–15 true-up, discussed in section 1.4.1.

## 1.3 AER's assessment approach

We are required to determine the ARR for Essential Energy for each regulatory year of the 2014–19 period.<sup>3</sup> The process for determining Essential 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 \$1291.7 million as the placeholder revenue for 2014–15 for Essential Energy,<sup>4</sup> 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.

<sup>3</sup> NER, cl. 6.2.3(a)(1).

<sup>4</sup> See NER, cl.11.56.4 and Essential Energy's placeholder determination for the transitional regulatory control period 2014–15.

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.

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.<sup>5</sup> Such understanding allows the AER to exercise judgement in determining the final inputs into the PTRM and the ARRs 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.<sup>6</sup> 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.<sup>7</sup> This is done through the determination of the X factors and the application of our true-up adjustment.<sup>8</sup> 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.<sup>9</sup> 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.<sup>10</sup>

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.<sup>11</sup> 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,<sup>12</sup> 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.

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<sup>5</sup> 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.

<sup>6</sup> NER, cl. 11.56.4(h)-(j).

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

<sup>8</sup> NER, cl. 6.5.9(a).

<sup>9</sup> NER, cl. 6.5.9(3)(i).

<sup>10</sup> NER, cl. 6.5.9(b)(2).

<sup>11</sup> NER, cl. 11.58.4(c).

<sup>12</sup> 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.

### 1.3.1 The building block approach

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 interactions between the cost elements, service quality and across years. Table 1-3 shows 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	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.<sup>13</sup> There is a 'transitional regulatory control period' for 2014–15, and a 'subsequent regulatory control period' from 2015–19. We are required to make both a decision on 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 Essential Energy's proposed revenue requirement for its transitional regulatory control period (2014–15). We determined a placeholder revenue allowance of \$1291.7 million (\$ nominal)<sup>14</sup> for Essential Energy in the transitional determination.<sup>15</sup>

In this draft decision, we make a full regulatory determination for the years 2015–16 to 2018–19 for Essential 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 (2014–19) period and use a net present value (NPV) neutral true-up mechanism to account for any difference between:<sup>16</sup>

<sup>13</sup> NER, cl. 11.56.4.

<sup>14</sup> AER, *Ausgrid, Endeavour Energy, Essential Energy, ActewAGL, Transitional distribution decision for 2014–15*, April 2014, p. 17.

<sup>15</sup> 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.

<sup>16</sup> NER, cl. 11.56.4(h)-(i).

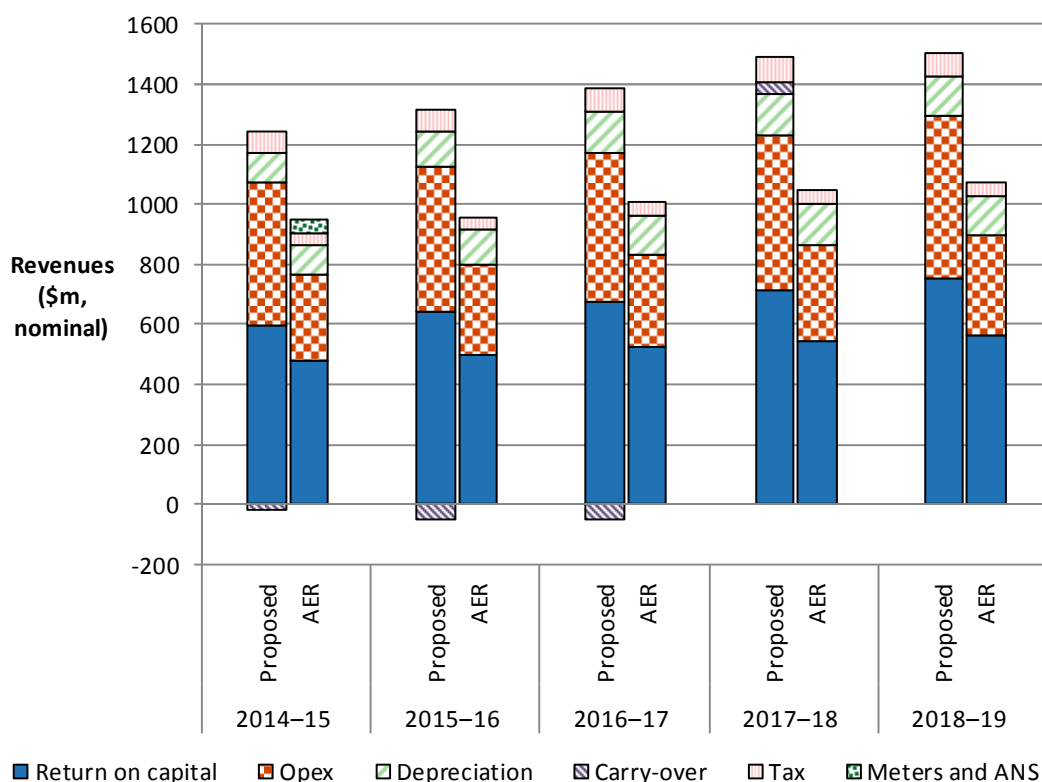
- the placeholder revenue for the transitional regulatory control period, and
- the ARR for 2014–15 that is established through the full determination process.

Our draft decision on the 2014–15 ARR for Essential Energy is \$952.9 million. 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 Essential Energy's first year expected revenue in the PTRM equal to the AER approved placeholder revenue for 2014–15 of \$1291.7 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 any difference in the revenues for 2014–15 between the transitional and full determination 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 \$338.9 million 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 Essential Energy is discussed further in section 1.4.1.

## 1.4 Reasons for draft decision

We determine a total revenue requirement of \$5038.5 million (\$ nominal) for Essential Energy over the 2014–19 period. This is \$1785.4 million (\$ nominal) or 26.2 per cent below Essential Energy's proposal and reflects the impact of our draft decision on the various building block costs. Figure 1-2 shows the difference between Essential Energy's proposed ARRs and our draft decision.

**Figure 1-2 AER's draft decision and Essential Energy's proposed annual revenue requirement (\$million, nominal)**



Source: AER analysis; Essential Energy, *Regulatory proposal*, May 2014, Attachment 4.1.

The most significant changes to Essential Energy's proposal include; a reduction in the rate of return of 1.7 per cent (attachment 3), a reduction in the capex allowance of 27.4 per cent (attachment 6), and a reduction in the opex allowance of 38.3 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 Essential Energy's proposal to account for the 2014–15 regulatory control period. 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 regulatory control 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, Essential Energy proposed an ARR of \$1420.6 million (\$ nominal) related to DUOS revenue.<sup>17</sup> We approved the placeholder revenue for 2014–15 of \$1291.7 million.<sup>18</sup> 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 rules<sup>19</sup> 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.<sup>20</sup>

**Table 1-4 Essential Energy proposed transitional placeholder revenue and AER transitional determination for 2014–15 (\$ million, nominal)**

	2013–14	2014–15
Essential Energy transitional proposal	1361.1	1420.6
Change in revenues		4.4%
AER transitional determination	1361.1	1291.7
Change in revenues		-5.1%

Source: Essential Energy, *Transitional regulatory proposal*, January 2014, Attachment A.  
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 \$1291.7 million (\$ nominal) provides a more appropriate base against which Essential 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 Essential Energy has not accounted for this lower approved revenue for 2014–15 in its proposal, we have recalculated

<sup>17</sup> Essential Energy, *Transitional regulatory proposal*, January 2014, Attachment A.

<sup>18</sup> AER, *Ausgrid, Endeavour Energy, Essential Energy, ActewAGL, Transitional distribution decision 2014–15*, April 2014, pp. 26–29.

<sup>19</sup> NER, cl. 11.55.3(i).

<sup>20</sup> AER, *Stage 2 Framework and Approach – NSW Distributors*, January 2014, p. 40.

Essential Energy's smoothed expected revenues.<sup>21</sup> We have done this recalculation by adjusting Essential Energy's proposed X factor for 2015–16 (the other years' X factors are as proposed), while ensuring NPV neutrality between these adjusted smooth proposal revenues and the unadjusted smoothed proposal revenues. This recalculation is required to allow Essential 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 Essential 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 \$1291.7 million (\$ nominal). This is equal to the placeholder revenue for 2014–15 and is \$338.9 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.<sup>22</sup>

We consider that our profile of X factors is reasonable 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 Essential Energy, the difference between the expected revenue and ARR for 2018–19 is around 11 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 Essential 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-up.

**Table 1-5 Essential 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
Essential Energy's adjusted proposal	1291.7	1391.5	1387.2	1386.6	1396.3
X factor	n/a	–5.10%	2.74%	2.48%	1.76%
AER draft decision	1291.7	885.9	908.0	930.7	954.0
X factor	n/a	33.09%	0.00%	0.00%	0.00%

Source: Essential Energy, *Regulatory proposal*, May 2014, Attachment 4.1. AER analysis.

## 1.4.2 Indicative average distribution price impact

Our draft decision on Essential Energy's expected revenues ultimately affects the prices consumers pay for electricity. Because we are regulating Essential Energy's standard control services under a revenue cap, the adjustments that we have made to Essential Energy's expected revenues do not directly translate to price impacts. This is because Essential Energy's revenue is fixed under the revenue cap form of control, so changes in the consumption of electricity will affect the price

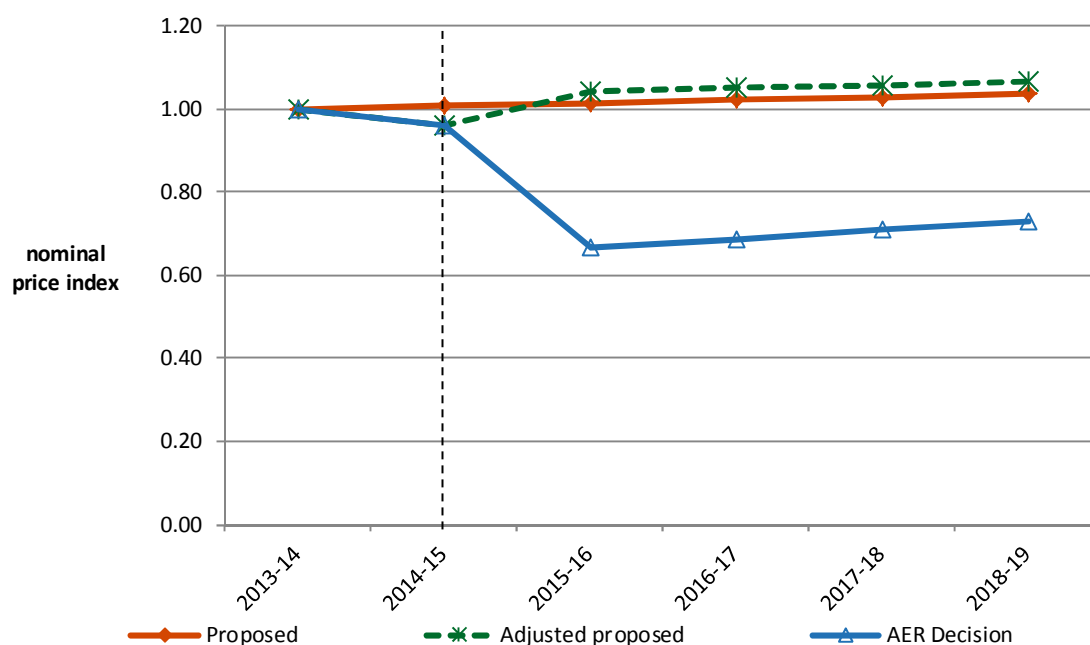
<sup>21</sup> We have also included an ACS adjustment to the proposed 2014–15 unsmoothed revenue before smoothing, consistent with our draft decision true-up approach. This adjustment is based on Essential Energy's metering proposal and the figures for ANS and ERW they provided as part of the transitional proposal.

<sup>22</sup> This also accounts for the time value of money.

consumers are charged. We are not required to establish the distribution prices for Essential Energy as part of this determination. However, we will assess Essential Energy's annual pricing proposals before the commencement of the remaining regulatory years for the 2014–19 period based on this distribution determination.

For this draft decision, we have estimated some of the indicative average distribution price impacts flowing from our determination on the expected revenues for Essential Energy over the 2014–19 period. Figure 1-3 shows Essential 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 Essential 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 Essential Energy's proposed indicative price path (nominal price index)**



Source: AER analysis.

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

We estimate that our draft decision on Essential Energy's annual expected revenue will result in a decrease to average distribution charges by about 5.1 per cent per annum over the 2014–19 period in nominal terms.<sup>23</sup> Our transitional determination resulted in an expected reduction in distribution charges of about 3.8 per cent in 2014–15. We estimate that our draft decision will further reduce distribution charges by another 30.9 per cent in 2015–16, followed by increases of about 3.1 per cent per annum from 2016–17 to 2018–19. This compares to the nominal average increase of approximately 2.7 per cent per annum proposed by Essential Energy over the 2015–19 regulatory control period.

<sup>23</sup> 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 7.4 per cent per annum, compared to a decline of 1.2 per cent per annum proposed by Essential Energy.

Table 1-6 displays the comparison of the price impacts of Essential Energy's adjusted proposal and our draft decision revenue allowance.

**Table 1-6 Comparison of price impacts of Essential Energy's adjusted proposal and the AER's draft decision**

	2013–14	2014–15	2015–16	2016–17	2017–18	2018–19
<b>Essential Energy proposal</b>						
Revenue (\$m, nominal) <sup>a</sup>	1361.1	1291.7	1391.5	1387.2	1386.6	1396.3
Price path (nominal index)	1.00	0.96	1.04	1.05	1.06	1.07
Revenue (change %)		-5.1%	7.7%	-0.3%	0.0%	0.7%
Price path (change %)		-3.8%	8.5%	0.7%	0.7%	0.7%
<b>AER draft decision</b>						
Revenue (\$m, nominal)	1361.1	1291.7	885.9	908.0	930.7	954.0
Price path (nominal index)	1.00	0.96	0.66	0.69	0.71	0.73
Revenue (change %)		-5.1%	-31.4%	2.5%	2.5%	2.5%
Price path (change %)		-3.8%	-30.9%	3.5%	3.3%	2.5%

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 43 per cent on average of Essential Energy's typical customer's annual electricity bill.<sup>24</sup> We expect that our draft decision, other things being equal, will reduce the average residential customer electricity bills in Essential 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 Essential 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 Essential Energy's residential customers could be expected to reduce by about \$45 or 1.6 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 \$346 or 13.0 per cent in 2015–16. This would be followed by increases of about \$25 or 1.1 per cent (\$ nominal) per annum from 2016–17 to 2018–19. In comparison, if we accepted Essential Energy's proposal, the average annual electricity bill for residential customers would increase by approximately \$30 or 1.1 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.<sup>25</sup> Therefore customers with different usage will experience

<sup>24</sup> Essential Energy, *Regulatory proposal*, May 2014, p. 4.

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



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 Essential 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 Essential Energy's network could be expected to reduce by about \$75 or 1.6 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 small business customers to reduce by a further \$584 or 13.0 per cent in 2015–16. This would be followed by increases of about \$42 or 1.1 per cent (\$ nominal) per annum from 2016–17 to 2018–19. In comparison, if we accepted Essential Energy's proposal, the average annual electricity bill for small business customers would increase by approximately \$51 or 1.1 per cent (\$ nominal) per annum over the 2015–19 regulatory control period.

Table 1-7 shows the estimated impact of our draft decision for the 2014–19 period and Essential Energy's proposal on the average residential and small business customers' annual electricity bills.

**Table 1-7 Estimated impact of Essential Energy's adjusted proposal and the AER draft decision on annual electricity bills for the 2014–19 period (\$ nominal)**

	2013–14	2014–15	2015–16	2016–17	2017–18	2018–19
<b>Essential Energy proposal</b>						
Residential annual bill	2703	2658	2753	2762	2771	2779
Annual change		-45 (-1.6%)	95 (3.6%)	8 (0.3%)	9 (0.3%)	9 (0.3%)
Small business annual bill	4567	4492	4652	4667	4681	4696
Annual change		-75 (-1.6%)	161 (3.6%)	14 (0.3%)	14 (0.3%)	14 (0.3%)
<b>AER draft decision</b>						
Residential annual bill	2703	2658	2313	2340	2366	2387
Annual change		-45 (-1.6%)	-346 (-13%)	27 (1.2%)	26 (1.1%)	21 (0.9%)
Small business annual bill	4567	4492	3908	3954	3998	4033
Annual change		-75 (-1.6%)	-584 (-13%)	46 (1.2%)	44 (1.1%)	35 (0.9%)

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 charge for a typical consumption of 6500 kWh per year during the period 1 July 2013 to 30 June 2014. The charges reflect regulated price only. Sample postcode: 2650.

(b) Based on the annual charge 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 charges reflect regulated price only. Sample postcode: 2650.

### 1.4.3 Shared assets

Service providers, such as Essential Energy, may use assets to provide both standard control services we regulate and unregulated services. These assets are called 'shared assets'.<sup>26</sup> Of the unregulated revenues a service provider earns from shared assets, 10 per cent will be used to reduce

<sup>26</sup> NER, cl. 6.4.4.

the service provider's prices for standard control services.<sup>27</sup> 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.<sup>28</sup>

Essential Energy submitted that its shared asset unregulated revenues are forecast to be between 0.10 and 0.17 per cent of its total expected revenue in each regulatory year of the 2014–19 period.<sup>29</sup> Based on our previous assessment of service provider unregulated revenues, we consider Essential Energy's forecasts are reasonable.<sup>30</sup> However, Essential Energy's forecast unregulated revenues must be compared to the regulated revenues we determine, rather than those proposed by Essential Energy. On that basis, we consider Essential Energy's unregulated revenues are between 0.10 and 0.24 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 Essential Energy's shared asset unregulated revenues and, if necessary, determine our own forecasts for future regulatory control periods.

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<sup>27</sup> AER, *Shared asset guideline*, November 2013.

<sup>28</sup> AER, *Shared asset guideline*, November 2013, p. 8.

<sup>29</sup> Essential Energy, *Regulatory proposal*, May 2014, p. 32.

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