



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

**Attachment 1 – Annual revenue**  
**requirement**

April 2015

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AER reference: 52294

## Note

This attachment forms part of the AER's final decision on Ausgrid's regulatory proposal 2015–19. It should be read with other parts of the final decision.

The final decision includes the following documents:

Overview

Attachment 1 - Annual revenue requirement

Attachment 2 - Regulatory asset base

Attachment 3 - Rate of return

Attachment 4 - Value of imputation credits

Attachment 5 - Regulatory depreciation

Attachment 6 - Capital expenditure

Attachment 7 - Operating expenditure

Attachment 8 - Corporate income tax

Attachment 9 - Efficiency benefit sharing scheme

Attachment 10 - Capital expenditure sharing scheme

Attachment 11 - Service target performance incentive scheme

Attachment 12 - Demand management incentive scheme

Attachment 13 - Classification of services

Attachment 14 - Control mechanism

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## Shortened forms

Shortened form	Extended form
AEMC	Australian Energy Market Commission
AEMO	Australian Energy Market Operator
AER	Australian Energy Regulator
augex	augmentation expenditure
capex	capital expenditure
CCP	Consumer Challenge Panel
CESS	capital expenditure sharing scheme
CPI	consumer price index
DRP	debt risk premium
DMIA	demand management innovation allowance
DMIS	demand management incentive scheme
distributor	distribution network service provider
DUoS	distribution use of system
EBSS	efficiency benefit sharing scheme
ERP	equity risk premium
Expenditure Assessment Guideline	expenditure forecast assessment Guideline for electricity distribution
F&A	framework and approach
MRP	market risk premium
NEL	national electricity law
NEM	national electricity market
NEO	national electricity objective
NER	national electricity rules
NSP	network service provider
opex	operating expenditure
PPI	partial performance indicators
PTRM	post-tax revenue model
RAB	regulatory asset base
RBA	Reserve Bank of Australia
repex	replacement expenditure
RFM	roll forward model

RIN	regulatory information notice
RPP	revenue and pricing principles
SAIDI	system average interruption duration index
SAIFI	system average interruption frequency index
SLCAPM	Sharpe-Lintner capital asset pricing model
STPIS	service target performance incentive scheme
WACC	weighted average cost of capital

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# 1 Annual revenue requirement

The annual revenue requirement (ARR) is the sum of the various building block costs for each year of the regulatory control period before smoothing. The ARR is smoothed across the period to reduce fluctuations between years and to determine expected revenues for each year. The expected revenues are the amounts that Ausgrid will target for annual pricing purposes and recover from customers for the provision of standard control services for each year of the regulatory control period. This attachment sets out our final decision on Ausgrid's ARR for the 2014–19 period and expected revenues for the 2015–19 regulatory control period. We consider these two periods to account for the 2014–15 transitional year that was set out in the transitional rules.

## 1.1 Final decision

We do not accept Ausgrid's revised proposed total revenue requirements<sup>1</sup> of \$10577.0 million for its distribution network and \$1369.6 million (\$ nominal) for its transmission network over the 2014–19 period. This is because we have not accepted the building block costs that Ausgrid proposed in its revised proposal.

We determine a total revenue requirement for the 2014–19 period, reflecting our final decision on the various building block costs, to be:

- \$7867.0 million (\$ nominal) for Ausgrid's distribution network. This is a reduction of \$2710.0 million (\$ nominal) or 25.6 per cent to Ausgrid's revised proposal.
- \$1012.3 million (\$ nominal) for Ausgrid's transmission network. This is a reduction of \$357.3 million (\$ nominal) or 26.1 per cent to Ausgrid's revised proposal.

We approved in our transitional determination placeholder revenues for 2014–15 of \$1956.4 million for Ausgrid's distribution network and \$252.3 million for its transmission network.<sup>2</sup> Under the transitional rules, we are required to determine the ARR for 2014–15 as part of this full determination process and do a true-up for the differences between the placeholder revenues and ARR. We have now determined ARR for 2014–15 of \$1546.0 million and \$192.8 million respectively for Ausgrid's distribution and transmission networks. The differences are therefore \$410.4 million and \$59.5 million (\$nominal) respectively. We have applied these differences as part of the smoothing process to establish the annual expected revenues for the 2015–19 regulatory control period.

As a result of our smoothing of the ARR, our final decision on the annual expected revenue and X factor (distribution and transmission networks) for each regulatory year

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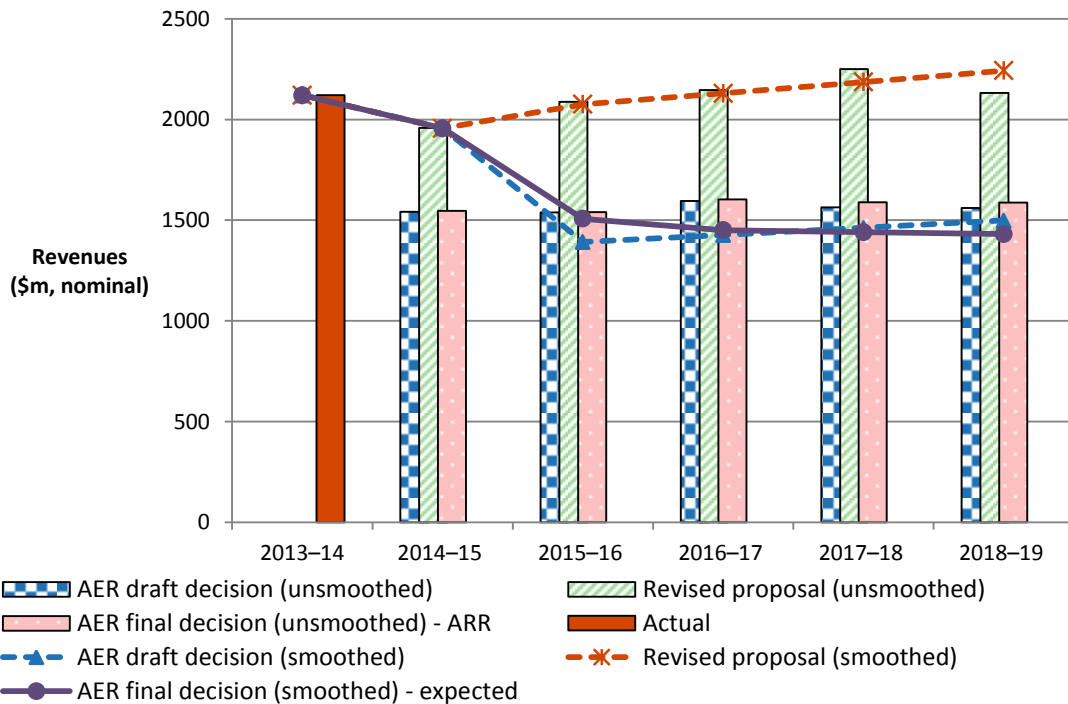
<sup>1</sup> This is referred to in the transitional rules as a 'notional' revenue requirement. We have adopted the standard terminology in chapter 6 to avoid confusion, but it still gives effect to the transitional rules.

<sup>2</sup> This is the amount determined in our transitional decision for 2014–15, see AER, *Ausgrid Endeavour Energy Essential Energy ActewAGL, Transitional distribution decision 2014–15*, April 2014, pp. 23-24.

of the 2015–19 regulatory control period is set out in Table 1.1 and Table 1.2. Our final decision is to approve total expected revenues (smoothed) of \$5827.7 million and \$748.8 million (\$ nominal) for the 2015–19 regulatory control period in relation to Ausgrid's distribution and transmission networks respectively.

Figure 1.1 shows the difference between Ausgrid's proposal (initial and revised) and our decision (draft and final) for its distribution network and Figure 1.2 shows same for its transmission network.

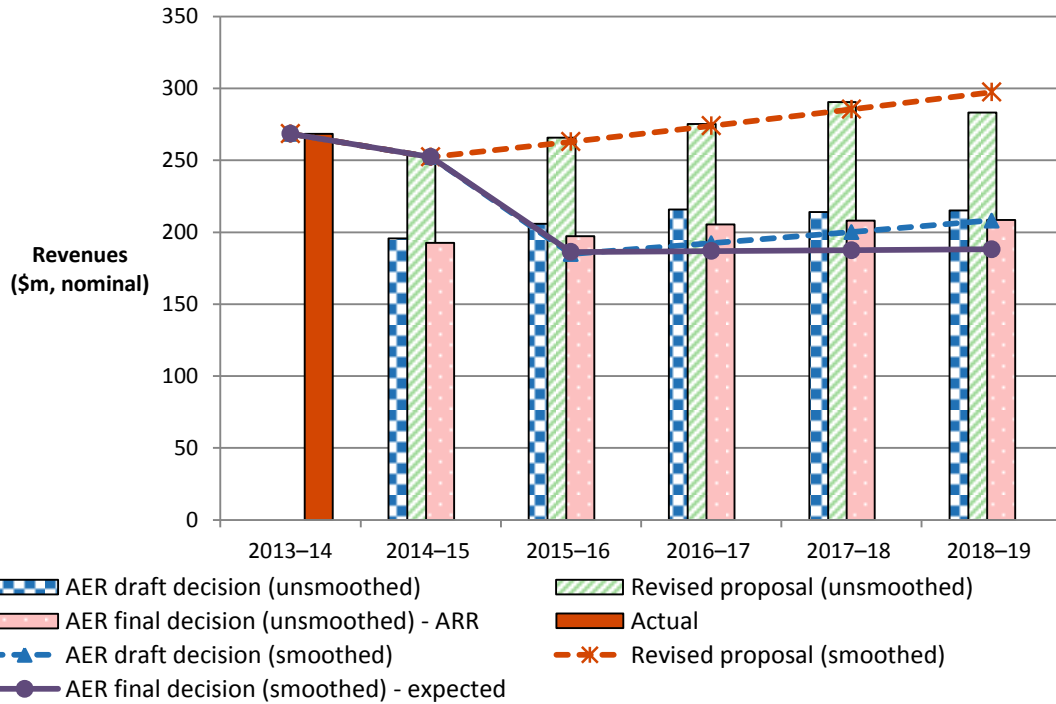
**Figure 1.1 AER's final decision on Ausgrid's revenues for the 2014–19 period – distribution (\$million, nominal)**



Source: AER analysis; Ausgrid, *Regulatory proposal*, June 2014. Attachment 4.01; Ausgrid, *Revised regulatory proposal*, January 2015. Attachment 4.08.



**Figure 1.2 AER's final decision on Ausgrid's revenues for the 2014–19 period – transmission (\$million, nominal)**



Source: AER analysis; Ausgrid, *Regulatory proposal*, June 2014. Attachment 4.02; Ausgrid, *Revised regulatory proposal*, January 2015. Attachment 4.09.

Table 1.1 shows our final decision on the building block costs for each year of the 2014–19 period for Ausgrid's distribution network. It also shows the ARR, annual expected revenue and X factor for each year of that period. Table 1.2 shows the same for Ausgrid's transmission network.

**Table 1.1 AER's final decision on Ausgrid's revenues for 2014–19 period – distribution (\$million, nominal)**

	2014–15	2015–16	2016–17	2017–18	2018–19	Total
Return on capital	826.2	848.5	879.7	906.4	936.2	4397.1
Regulatory depreciation	146.7	166.5	188.2	158.8	160.5	820.7
Operating expenditure	377.7	392.3	409.2	412.8	429.1	2021.1
Revenue adjustments <sup>a</sup>	81.1	75.0	60.6	43.3	1.1	261.2
Net tax allowance	51.6	58.5	65.6	67.2	61.4	304.3
Metering, ANS & ERW net costs <sup>b</sup>	62.6	0.0	0.0	0.0	0.0	62.6
Annual revenue requirement (unsmoothed)	1546.0	1540.9	1603.2	1588.5	1588.4	7867.0
<b>Annual expected revenue (smoothed)</b>	<b>1956.4</b>	<b>1507.0</b>	<b>1450.3</b>	<b>1440.2</b>	<b>1430.3</b>	<b>7784.2</b>

X factor <sup>c</sup>	n/a <sup>d</sup>	24.77%	6.00%	3.00%	3.00%	n/a
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Source: AER analysis.

- (a) Revenue adjustments include efficiency benefit sharing scheme carry-overs and forecast demand management incentive allowance (DMIA).
- (b) 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.
- (c) The X factor from 2016–17 to 2018–19 will be revised to reflect the annual return on debt update. Under the CPI–X framework, the X factor measures the real rate of change in annual expected revenue from one year to the next. A negative X factor represents a real increase in revenue. Conversely, a positive X factor represents a real decrease in revenue.
- (d) In our transitional decision, we determined the placeholder revenue for 2014–15. In this final 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 Ausgrid's total revenue requirement for the 2015–19 regulatory control period for the difference between the placeholder revenue and our decision on Ausgrid's efficient costs for 2014–15.

**Table 1.2 AER's final decision on Ausgrid's revenues for 2014–19 period – transmission (\$million, nominal)**

	2014–15	2015–16	2016–17	2017–18	2018–19	Total
Return on capital	137.3	136.9	139.4	146.2	148.9	708.6
Regulatory depreciation	14.5	18.4	22.9	20.6	20.5	96.8
Operating expenditure	30.0	31.1	32.7	32.2	33.4	159.4
Revenue adjustments <sup>a</sup>	5.8	5.4	4.3	3.1	0.0	18.6
Net tax allowance	5.2	5.5	6.3	6.1	5.9	28.9
Annual revenue requirement (unsmoothed)	192.8	197.3	205.5	208.1	208.6	1012.3
<b>Annual expected revenue (smoothed)</b>	<b>252.3</b>	<b>186.3</b>	<b>186.9</b>	<b>187.5</b>	<b>188.1</b>	<b>1001.1</b>
X factor <sup>b</sup>	n/a <sup>c</sup>	27.89%	2.00%	2.00%	2.00%	n/a

Source: AER analysis.

- (a) Revenue adjustments include efficiency benefit sharing scheme carry-overs.
- (b) The X factor from 2016–17 to 2018–19 will be revised to reflect the annual return on debt update. Under the CPI–X framework, the X factor measures the real rate of change in annual expected revenue from one year to the next. A negative X factor represents a real increase in revenue. Conversely, a positive X factor represents a real decrease in revenue.
- (c) In our transitional decision, we determined the placeholder revenue for 2014–15. In this final 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 Ausgrid's total revenue requirement for the 2015–19 regulatory control period for the difference between the placeholder revenue and our decision on Ausgrid's efficient costs for 2014–15.

## 1.2 Ausgrid's revised proposal

Ausgrid's revised proposal included a total revenue requirement of \$10577.0 million (\$ nominal) for its distribution network and \$1369.6 million (\$ nominal) for its transmission network. Table 1.3 shows Ausgrid's revised proposed distribution building block costs, the ARR, expected revenue and X factor for each year of the 2014–19 period. Table 1.4 shows the same for its transmission network.

**Table 1.3 Ausgrid's revised proposed revenues for the 2014–19 period – distribution (\$million, nominal)**

	2014–15	2015–16	2016–17	2017–18	2018–19	Total
Return on capital	1084.0	1134.4	1190.1	1238.6	1289.3	5936.4
Regulatory depreciation	132.6	152.3	174.1	144.9	146.7	750.5
Operating expenditure <sup>a</sup>	511.5	545.8	543.5	553.7	565.9	2720.4
Efficiency benefit sharing scheme (carryover amounts)	95.3	106.6	83.7	138.2	0.0	423.8
Net tax allowance	135.7	149.5	155.1	175.5	130.0	745.8
Annual revenue requirement (unsmoothed)	1959.0	2088.7	2146.6	2250.9	2131.8	10577.0
<b>Annual expected revenue (smoothed)</b>	<b>1956.4</b>	<b>2075.5</b>	<b>2129.9</b>	<b>2185.7</b>	<b>2243.0</b>	<b>10590.7</b>
X factor	9.48%	–3.50%	–0.12%	–0.12%	–0.12%	n/a

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

(a) Ausgrid's revised proposal opex included DMIA and D-factor amounts.

**Table 1.4 Ausgrid's revised proposed revenues for the 2014–19 period – transmission (\$million, nominal)**

	2014–15	2015–16	2016–17	2017–18	2018–19	Total
Return on capital	180.1	182.7	188.4	200.5	205.3	957.1
Regulatory depreciation	12.2	16.1	20.9	18.6	18.6	86.4
Operating expenditure	40.3	43.3	43.3	43.1	44.0	214.1
Efficiency benefit sharing scheme (carryover amounts)	6.9	7.8	6.1	10.1	0.0	30.9
Net tax allowance	15.1	15.9	16.7	18.2	15.3	81.1
Annual revenue requirement (unsmoothed)	254.6	265.8	275.4	290.5	283.3	1369.6
<b>Annual expected revenue (smoothed)</b>	<b>252.3</b>	<b>262.9</b>	<b>274.0</b>	<b>285.5</b>	<b>297.4</b>	<b>1372.1</b>
X factor	8.31	–1.66	–1.66%	–1.66%	–1.66%	n/a

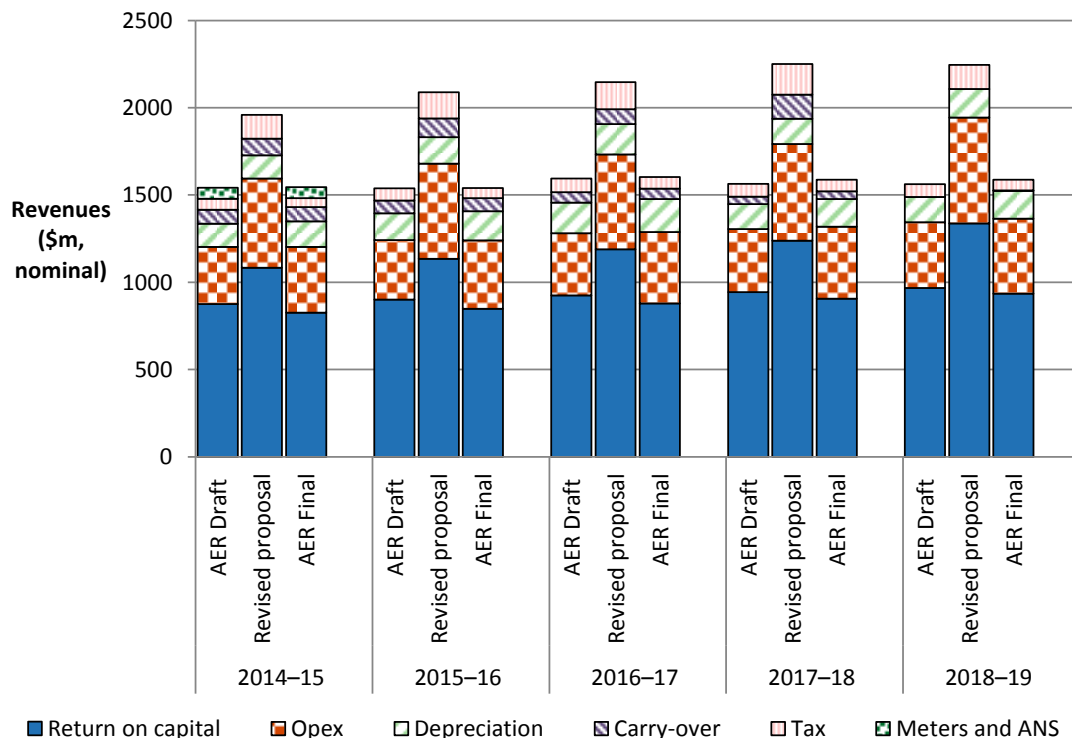
### 1.3 AER’s assessment approach

We did not change our assessment approach for the ARR from our draft decision. Section 1.3 of our draft decision details that approach. As noted in the draft decision, we have reviewed our revenue smoothing for the final decision and this is discussed further in section 1.4.2

### 1.4 Reasons for final decision

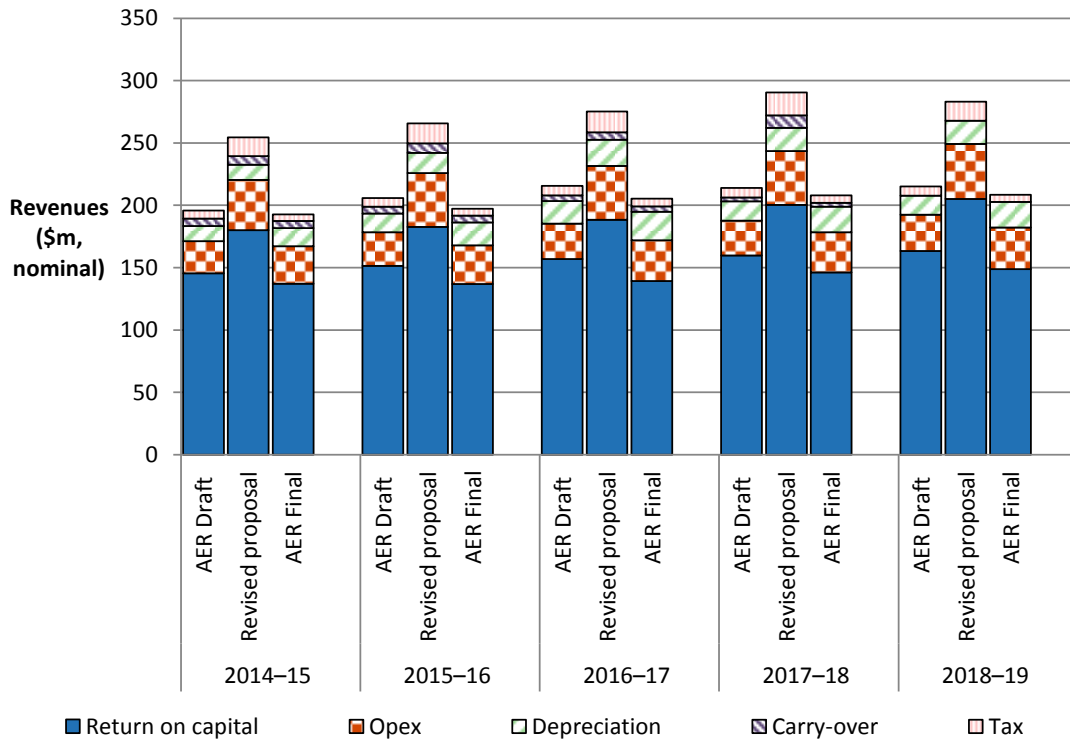
For this final decision, we determine total revenue requirements of \$7867.0 million and \$1012.3 million (\$ nominal) over the 2014–19 period for Ausgrid's distribution and transmission networks respectively. This is \$2710.0 million (\$ nominal) or 25.6 per cent below Ausgrid's revised proposal for its distribution network and \$357.3 million (\$ nominal) or 26.1 per cent below Ausgrid's revised proposal for its transmission network. These revenues reflect the impact of our final decision on the various building block costs. Figure 1.3 shows the difference between Ausgrid's revised proposed ARRs and our final decision for its distribution network. Figure 1.4 shows the same for Ausgrid's transmission network.

**Figure 1.3 AER's final decision and Ausgrid's revised proposed annual revenue requirement – distribution (\$million, nominal)**



Source: AER analysis; Ausgrid, *Revised regulatory proposal*, January 2014, Attachment 4.08.

**Figure 1.4 AER's final decision and Ausgrid's revised proposed annual revenue requirement – transmission (\$million, nominal)**



Source: AER analysis; Ausgrid, *Regulatory proposal*, May 2014, Attachment 4.02.

The most significant changes to Ausgrid's revised proposal include: a lower rate of return of 2.1 per cent for 2014-15 and 2.2 per cent for 2015-19 (attachment 3), a reduction in the capex allowance of 16.8 per cent (attachment 6), and a reduction in the opex allowance of 25.6 per cent (attachment 7).

### 1.4.1 Revenue true-up for transitional year

The five regulatory years for 2014-19 are split over two regulatory control periods due to the transitional rules. There is a 'transitional regulatory control period' for 2014-15, and a 'subsequent regulatory control period' for 2015-19.<sup>3</sup> 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.<sup>4</sup>

In April 2014, as required under the transitional rules, we conducted a high level review of Ausgrid's proposed revenue requirement for its transitional regulatory control period (2014-15). We determined placeholder revenue allowances of \$1956.4 million for

<sup>3</sup> NER cl. 11.55.1.

<sup>4</sup> NER cl 11.56.1 and 11.56.4.

Ausgrid's distribution network<sup>5</sup> and \$252.3 million (\$ nominal) for Ausgrid's transmission network.<sup>6</sup> The distribution revenue includes all costs associated with standard control services, including type 5 and 6 metering services, ancillary network services (ANS) and emergency recoverable works (ERW), which were re-classified from standard control services (SCS) to alternative control services (ACS) as at 1 July 2014. The transitional rules<sup>7</sup> prevented the reallocation of type 5 and 6, ANS and ERW costs in 2014–15 despite the change in classification from standard control services to alternative control services as at 1 July 2014.<sup>8</sup>

In our draft decision, we made a full regulatory determination for the years 2015–16 to 2018–19 for Ausgrid, and we accounted for any adjustment amount related to the transitional regulatory control period (2014–15). As part of this, we were required to determine ARR 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>9</sup>

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

Ausgrid's revised proposal agreed with our approach for the true-up for both SCS and ACS.<sup>10</sup> Its revised proposal distribution PTRM adopted our approach to true-up the 2014–15 revenue for SCS. However, Ausgrid's distribution PTRM did not adjust its revised proposal SCS revenues to include the true-up of 2014–15 revenue from ACS. Therefore, we adjusted Ausgrid's revised proposed distribution smoothed revenues to include the 2014–15 revenue for ACS to allow comparison with our final decision.

In its submission to the draft decision, AGL opposed including opex in the 2014–15 true-up. AGL considered it punitive to include opex in the true-up because these businesses have little control over the 2014–15 opex at this point in time.<sup>11</sup> We consider that the transitional rules require a true-up to be performed for the difference between the revenue determined in this full determination and the placeholder revenue for the transitional year.<sup>12</sup> This requires us to include our final decision on the opex allowance for 2014–15 as part of our true-up.

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<sup>5</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 consistent with clause 11.56.3.(a)(1) of the NER. For the final decision the ANS and ERW costs for 2014–15 are those provided by Ausgrid for the transitional decision. The actual total costs for these services for 2014–15 will be determined as part of the final decision.

<sup>6</sup> AER, *Ausgrid, Endeavour Energy, Essential Energy, ActewAGL, Transitional distribution decision 2014–15*, April 2014, p. 17.

<sup>7</sup> NER, cl 11.56.3(a)(1) and 11.56.3(i).

<sup>8</sup> AER, *Stage 2 Framework and Approach – NSW Distributors*, January 2014, p. 40.

<sup>9</sup> NER, cl 11.56.4(h)-(i).

<sup>10</sup> Ausgrid, *Revised regulatory proposal*, January 2014, p.68.

<sup>11</sup> AGL, *Submission on NSW DNSPs draft decision*, 15 February 2015, p. 3.

<sup>12</sup> NER, cl 11.56.4(h)-(i).

Our final decision approves 2014–15 ARR of \$1546.0 million and \$192.8 million for Ausgrid's distribution and transmission networks respectively. The distribution ARR for 2014–15 includes our forecasts of efficient costs associated with standard control services. It also includes the costs associated with type 5 and 6 metering services and other ACS consistent with the transitional rules.<sup>13</sup> We do not accept Ausgrid's revised proposed costs of \$75.1 million associated with these services. Our final decision is to include a value of \$62.6 million for the costs associated with these services.<sup>14</sup> The difference reflects our determination of efficient costs associated with providing these services. Therefore, the differences between the ARRs (\$1546.0 million and \$192.8 million respectively) and the placeholder revenues (\$1956.4 million and \$252.3 million respectively) should be returned to customers.

To give effect to the true-up, we have set Ausgrid's first year expected revenues in the PTRMs (transmission and distribution) equal to the AER approved placeholder revenues for 2014–15 of \$1956.4 million and \$252.3 million respectively. This is the only practical option as distribution and transmission prices were set for 2014–15 based on these approved placeholder amounts. However, this practicality also means that the difference in 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. This is done through the determination of the X factors for each of the remaining years in that period.<sup>15</sup> This gives effect to the true-up requirements under the NER and returns the differences of \$410.4 million for distribution and \$59.5 million (\$ nominal) for transmission to customers over the 2015–19 regulatory control period (adjusted for the time value of money).

### 1.4.2 Smoothing of revenues

The smoothing profile of revenues has been impacted significantly by the shortened subsequent regulatory control period, the requirement for a true-up of the 2014–15 placeholder revenue, and in the case of distribution revenues, the removal of metering and other ACS (such as ANS and ERW) costs from standard control services from 1 July 2015. The true-up for 2014–15, and in the case of distribution revenues, the removal of metering and other ACS costs from standard control services have significant impacts on the decrease in revenues from 2014–15 to 2015–16.

The NSW service providers submitted that the draft decision smoothing profile did not provide them with the appropriate opportunity to improve tariff efficiency and equity

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<sup>13</sup> NER, cl 11.55.3(i).

<sup>14</sup> Refer to attachment 16 – Alternative control services for further details.

<sup>15</sup> The X factors represent the rate of change in the real revenue path over the 2014–19 period under the CPI–X framework. They must equalise (in net present value terms) the total expected revenues to be earned by the service provider with the total revenue requirement for that period.

without imposing price shocks. The submission suggested a smoothing profile that applied a staged reduction in revenues to achieve the significant reductions in revenues.<sup>16</sup>

For this final decision, the expected revenue in the last year of the regulatory control period is not required to be as close as reasonably possible to the ARR for that year, due to the transitional provisions.<sup>17</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, as a result of the shortened regulatory control period, the required true-up for 2014–15 and, in the case of distribution revenues, that metering and other ACS costs are removed from standard control services from 1 July 2015, we consider that our final decision X factors results in a revenue profile that is reasonable and reflects the NSW service providers' preferred smoothing profile outlined in its submission. We have allowed the difference between smoothed and unsmoothed revenues in the last year of the 2014–19 period to diverge more than would be usual. This approach smooths the revenues further than in the draft decision and allows for a more gradual path for lower revenues over the 2014–19 period.

Our final decision smoothing profiles result in differences between the expected revenues and ARRs for 2018–19 of around 10 per cent for distribution and transmission.<sup>18</sup> While these divergences are significant, the smoothing 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.

Table 1.5 and Table 1.6 show the expected revenues (smoothed) of Ausgrid's revised proposal and our final decision expected revenues (smoothed) for Ausgrid's distribution and transmission networks respectively. Both use the 2014–15 placeholder revenues as a base to account for the true-up.

**Table 1.5 Ausgrid's revised proposal and AER's final decision smoothed expected revenues for the 2014–19 period – distribution (\$million, nominal)**

	2014–15	2015–16	2016–17	2017–18	2018–19
Ausgrid's revised proposal <sup>a</sup>	1956.4	2097.8	2152.8	2209.2	2131.8
X factor	n/a	–4.61%	–0.12%	–0.12%	–0.12%
AER final decision	1956.4	1507.0	1450.3	1440.2	1430.3
X factor	n/a	24.77%	6.00%	3.00%	3.00%

<sup>16</sup> Networks NSW, *NSW DNSP's submission on the AER's draft determinations*, 13 February 2015, pp. 7–8.

<sup>17</sup> NER, cl 11.56.4(c).

<sup>18</sup> Clause 11.56.4(c) of the NER removes the requirement under cl. 6.5.9(b)(2) of the NER, that the X factors be set to minimise the variance, as far as reasonably possible, between expected revenue and ARR of the last regulatory year of the regulatory control period.



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

- (a) Ausgrid's revised proposal revenue was adjusted to include ACS revenue of \$72 million (\$ nominal) for metering, ANS and ERW for 2014–15. The smoothed revenues presented reflect this adjustment to Ausgrid's revised proposal PTRM.

**Table 1.6 Ausgrid's revised proposal and AER's final decision smoothed expected revenues for the 2014–19 period – transmission (\$million, nominal)**

	2014–15	2015–16	2016–17	2017–18	2018–19
Ausgrid's revised proposal	252.3	262.9	274.0	285.5	297.5
X factor	n/a	–1.66%	–1.66%	–1.66%	–1.66%
AER final decision	252.3	186.3	186.9	187.5	188.1
X factor	n/a	27.89%	4.00%	2.50%	2.00%

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

We note that Ausgrid's transmission network has an under-recovery of \$20 million in its allowed transmission revenue for 2013–14.<sup>19</sup> Under a revenue cap Ausgrid can recover this amount in future years. We have no role in considering the regulatory treatment of this under-recovery in this decision. Any decision by Ausgrid to recover this revenue in later years would affect transmission prices for its customers independently of our determination for the 2014–19 period.

### 1.4.3 Shared assets

In the draft decision, we considered that Ausgrid's forecast shared asset unregulated revenues do not meet the minimum threshold for adjustments to be made to its ARR.<sup>20</sup> We continue to maintain this view. Our final decision is therefore consistent with our draft decision.

### 1.4.4 Indicative average distribution price impact

Our final decision on Ausgrid's expected revenues ultimately affects the prices consumers pay for electricity. There are several steps required in translating our revenue decision to a price impact, and the steps are different depending on the network component:

<sup>19</sup> AER, *Ausgrid Endeavour Energy Essential Energy ActewAGL, Transitional distribution decision 2014–15*, April 2014, p. 20.

<sup>20</sup> AER, *Draft decision Ausgrid distribution determination – Attachment 1 – Annual revenue requirement*, November 2014, pp. 22-23.

- For Ausgrid's distribution assets, we regulate standard control services under a revenue cap form of control. This means the adjustments that we have made to Ausgrid's expected revenues do not directly translate to price impacts. This is because Ausgrid'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 Ausgrid as part of this determination. However, we will assess Ausgrid's annual pricing proposals before the commencement of each regulatory year for the 2015–19 regulatory control period to administer the pricing requirements of this distribution determination.
- For Ausgrid's transmission assets, we are also regulating transmission standard control services under a revenue cap. Similar to distribution, this means that changes in consumption of electricity will affect the prices charged to consumers. Further, transmission charges are collected with regard to the entire transmission network across NSW and the ACT, since the Ausgrid transmission assets are an embedded component of the broader transmission network. TransGrid, which is the coordinating transmission network service provider (TNSP) for this network region, establishes transmission charges and then provides Ausgrid with its portion of revenues.<sup>21</sup>

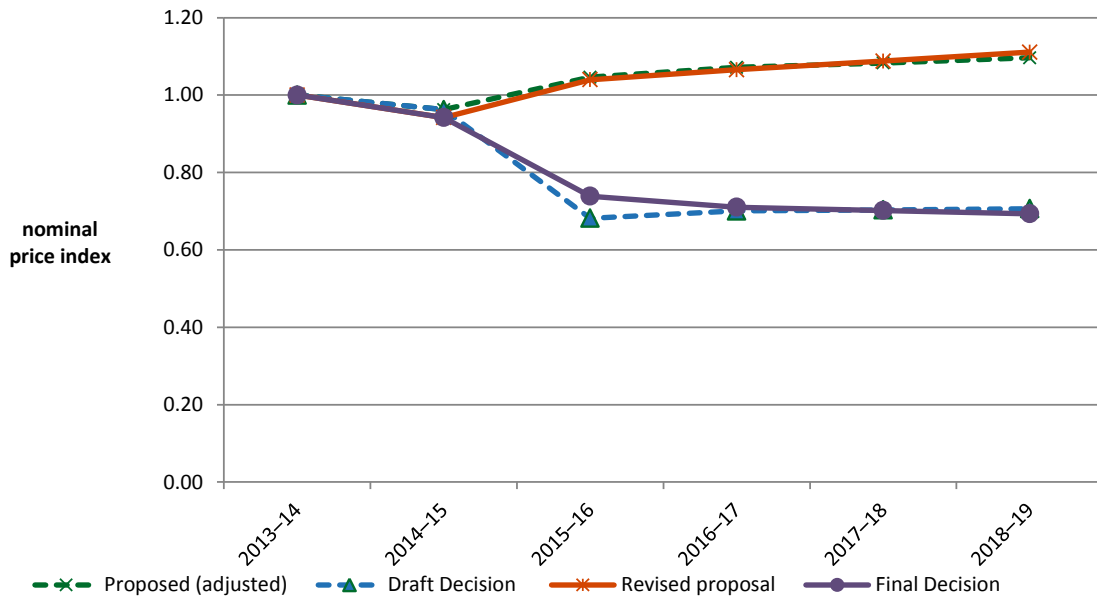
For this final decision, we have estimated some indicative average distribution and transmission price impacts flowing from our determination on the expected revenues for Ausgrid over the 2014–19 period. Figure 1.5 and Figure 1.6 show Ausgrid's indicative price paths (distribution and transmission) based on the expected revenues established in our final decision compared to its revised proposal. For Ausgrid's distribution network we used the data on price changes Ausgrid provided in its revised proposal, which appeared to be consistent with price cap calculations. We have adopted the data to determine the movement in overall prices. For Ausgrid's transmission network, noting that transmission prices will be established by TransGrid for the entire NSW transmission network, we can estimate average prices by dividing total revenue with total forecast energy consumed in NSW. The energy is based on the forecast for NSW by AEMO.<sup>22</sup> For presentational purposes, the prices are scaled so that the price index begins at 1.0 in 2013–14. The index provides a simple overall measure of the relative movement in expected distribution and transmission prices over the 2014–19 period.

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<sup>21</sup> See AER, *Final decision TransGrid transmission determination – Attachment 1 – Maximum allowed revenue*, April 2015, section 1.4.3.

<sup>22</sup> This approach is further discussed in the AER's final determination for TransGrid, see AER, *TransGrid transmission determination 2015–16 to 2017–18*, April 2015, Attachment 1.

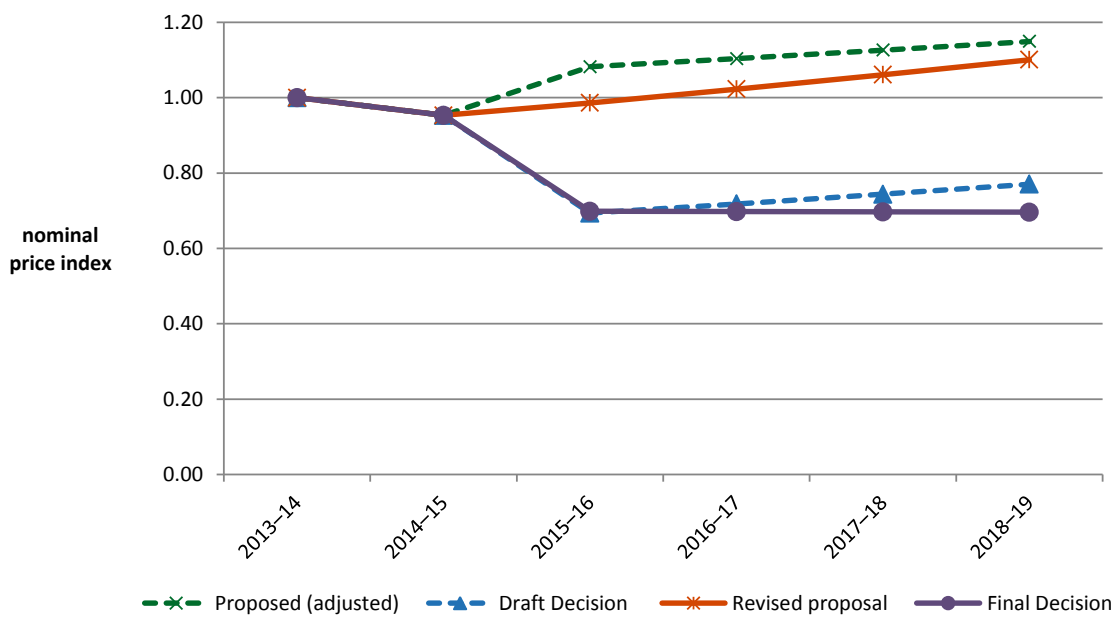
**Figure 1.5 AER's final decision and Ausgrid's revised proposed indicative price paths – distribution (nominal price index)**



Source: AER analysis.

Notes: The nominal price index is calculated by the AER based on the indicative weighted average price changes submitted by Ausgrid in its revised proposal, and adjusting for the change in overall revenue substituted by the AER.

**Figure 1.6 AER's final decision and Ausgrid's revised proposed indicative price paths – transmission (nominal price index)**



Source: AER analysis.

Notes: The nominal price index is calculated by the AER based on overall revenue and the (state wide) transmission network energy forecasts used for TransGrid (the NSW/ACT transmission network service provider).

We estimate that our final decision on Ausgrid's annual expected revenue will result in a decrease to average distribution charges by about 6.1 per cent per annum over the 2014–19 period in nominal terms. This amount includes a forecast inflation rate of 2.38 per cent per annum. In real terms we estimate average distribution charges to decline by 9.2 per cent per annum, compared to a decline of 0.4 per cent proposed by Ausgrid (based on Ausgrid's proposed forecast inflation rate of 2.50 per cent per annum). Our transitional determination resulted in an expected reduction in distribution charges of about 5.8 per cent in 2014–15. We estimate that our final decision will further reduce distribution charges by another 21.6 per cent in 2015–16, followed by decreases of about 2.1 per cent per annum from 2016–17 to 2018–19. This compares to the nominal increase of approximately 10.4 per cent per annum in 2015–16, followed by increases of 2.2 per cent per annum from 2016–17 to 2018–19 in Ausgrid's revised proposal.

Table 1.7 and Table 1.8 display the comparison of the price impacts of Ausgrid's revised proposal and our final decision revenue allowance for its distribution and transmission networks respectively.

**Table 1.7 Comparison of revenue and price impacts of Ausgrid's revised proposal and AER's final decision – distribution**

	2013–14	2014–15	2015–16	2016–17	2017–18	2018–19
<b>Ausgrid revised proposal</b>						
Revenue (\$m, nominal) <sup>a</sup>	2120.1	1956.4	2097.8	2152.8	2209.2	2267.1
Price path (nominal index)	1.00	0.94	1.04	1.07	1.09	1.11
Revenue (change %)		-7.7%	7.2%	2.6%	2.6%	2.6%
Price path (change %)		-5.8%	10.4%	2.5%	2.1%	2.1%
<b>AER final decision</b>						
Revenue (\$m, nominal)	2120.1	1956.4	1507.0	1450.3	1440.2	1430.3
Price path (nominal index)	1.00	0.94	0.74	0.71	0.70	0.69
Revenue (change %)		-7.7%	-23.0%	-3.8%	-0.7%	-0.7%
Price path (change %)		-5.8%	-21.6%	-3.9%	-1.2%	-1.2%

Source: AER analysis.

(a) Ausgrid's revised proposal smoothed revenue has been adjusted to allow for the true-up of proposed ACS and ERW revenues of \$72.1 million (\$ nominal) in 2014–15. This results in a revised X factor of -4.61 per cent for 2015–16.

**Table 1.8 Comparison of revenue and price impacts of Ausgrid's revised proposal and AER's final decision – transmission**

	2013–14	2014–15	2015–16	2016–17	2017–18	2018–19
<b>Ausgrid revised proposal</b>						
Revenue (\$m, nominal)	268.5	252.3	262.9	274.0	285.5	297.5
Price path (nominal index)	1.00	0.95	0.99	1.02	1.06	1.10
Revenue (change %)		-6.0%	4.2%	4.2%	4.2%	4.2%
Price path (change %)		-4.7%	3.5%	3.7%	3.7%	3.7%
<b>AER final decision</b>						
Revenue (\$m, nominal)	268.5	252.3	190.8	187.5	187.2	187.8
Price path (nominal index)	1.00	0.95	0.72	0.70	0.70	0.69
Revenue (change %)		-6.0%	-24.4%	-1.72.5%	-0.2%	0.3%
Price path (change %)		-4.7%	-24.9%	-2.2%	-0.6%	-0.1%

Source: AER analysis.

Distribution charges represent approximately 39 per cent on average of Ausgrid's typical customer's annual electricity bill.<sup>23</sup> We expect that our final decision, holding all other components of the bill constant, will reduce the average annual electricity bills for residential customers in Ausgrid's network. This is because we estimate that our final decision will result in lower distribution charges on average over the 2014–19 period compared to Ausgrid's revised proposal as discussed above.

Based on the lower distribution charges from our transitional determination passing through to customers, the average annual electricity bill for Ausgrid's residential customers could be expected to reduce by about \$47 or 2.2 per cent (\$ nominal) in 2014–15. Based on the distribution charges from our final decision passing through to customers, we would expect the average annual electricity bill for residential customers to reduce by a further \$165 or 8.0 per cent in 2015–16. This would be followed by reductions of about \$12 or 0.7 per cent (\$ nominal) per annum from 2016–17 to 2018–19. By comparison, had we accepted Ausgrid's revised proposal, the average annual electricity bill for residential customers would increase by \$79 or 3.8 per cent in 2015–16. This would be followed by increases of approximately \$19 (0.9 per cent) per annum between 2016–17 and 2018–19.

Our estimate of the potential impact our final decision will have for Ausgrid's residential customers is based on the typical annual electricity usage of 6500 kWh per annum for

<sup>23</sup> Ausgrid, *Regulatory proposal*, May 2014, p. 4.

a residential customer in NSW.<sup>24</sup> Therefore, 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 final decision for Ausgrid is expected to lead to lower average annual electricity bills. We estimate that based on the lower distribution charges arising from our transitional determination passing through to customers, the average annual electricity bill for small business customers in Ausgrid's network could be expected to reduce by about \$75 or 2.2 per cent (\$ nominal) in 2014–15. Based on the lower distribution charges from our final decision passing through to customers, we would expect the average annual electricity bill for small business customers to reduce by a further \$264 or 8.0 per cent in 2015–16. This would be followed by reductions of about \$20 or 0.7 per cent (\$ nominal) per annum from 2016–17 to 2018–19. By comparison, had we accepted Ausgrid's revised proposal, the average annual electricity bill for small business customers would increase by \$127 or 3.8 per cent in 2015–16. This would be followed by increases of approximately \$31 or 0.9 per cent (\$ nominal) per annum between 2016–17 and 2018–19.

Table 1.9 shows the estimated annual average impact of our final decision for Ausgrid's distribution network over the 2014–19 period on the average residential and small business customers' annual electricity bills.

Our final decision revenues for Ausgrid's transmission network make up a relatively small proportion of the overall transmission revenues applicable to NSW/ACT. TransGrid is the main transmission network service provider in NSW/ACT, and we are setting its revenue requirements concurrent with this process. Ausgrid collects its transmission revenues from TransGrid, the coordinating TNSP for NSW/ACT. In estimating the indicative impact of our final decision on transmission charges, we include Ausgrid's transmission revenues with TransGrid's revenues.<sup>25</sup> We discuss the overall transmission price impact in our final decision for TransGrid.

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<sup>24</sup> IPART, *Final report: Review of regulated retail prices for Electricity from 1 July 2013 to 30 June 2016*, June 2013, p. 5.

<sup>25</sup> We also include ActewAGL's and Directlink's transmission revenues—they operate transmission assets in NSW/ACT.

**Table 1.9 Estimated impact of Ausgrid's revised proposal and AER's final decision on annual electricity bills for the 2014–19 period (\$ nominal)**

	2013–14	2014–15	2015–16	2016–17	2017–18	2018–19
<b>Ausgrid revised proposal</b>						
Residential annual bill <sup>a</sup>	2106	2059	2138	2159	2177	2196
Annual change		-47 (-2.2%)	79 (3.8%)	21 (1.0%)	18 (0.8%)	19 (0.9%)
Small business annual bill <sup>b</sup>	3374	3299	3426	3459	3488	3518
Annual change		-75 (-2.2%)	127 (3.8%)	34 (1.0%)	29 (0.8%)	30 (0.9%)
<b>AER final decision</b>						
Residential annual bill <sup>a</sup>	2106	2059	1894	1871	1864	1857
Annual change		-47 (-2.2%)	-165 (-8.0%)	-23 (-1.2%)	-7 (-0.4%)	-7 (-0.4%)
Small business annual bill <sup>b</sup>	3374	3299	3035	2998	2987	2976
Annual change		-75 (-2.2%)	-264 (-8.0%)	-37 (-1.2%)	-11 (-0.4%)	-11(-0.4%)

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 annual bill for typical consumption of 6500kWh per year during the period 1 July 2013 to 30 June 2014. The charges reflect regulated price only. Sample postcode: 2112.
- (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: 2112.