



# ICRC

independent competition and regulatory commission

Final Decision  
**Retail Price Adjustment  
for Franchise Electricity  
Customers 2013–14**

Report 4 of 2013

June 2013

The Independent Competition and Regulatory Commission (the Commission) was established by the *Independent Competition and Regulatory Commission Act 1997* (ICRC Act) to determine prices for regulated industries, advise government about industry matters, advise on access to infrastructure, and determine access disputes. The Commission also has responsibilities under the ICRC Act for determining competitive neutrality complaints and providing advice about other government-regulated activities. Under the *Utilities Act 2000*, the Commission has responsibility for licensing utility services and ensuring compliance with licence conditions.

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# 1 Introduction

The Treasurer provided the Independent Competition and Regulatory Commission (the Commission) a reference for the supply of electricity to franchise customers from 1 July 2012 to 30 June 2014 (see Appendix 1).

When the ACT Government decided to allow all customers to be contestable, it also required that ActewAGL Retail offer customers consuming less than 100 MWh per year a non-negotiated standard customer contract incorporating a tariff approved by the Commission. Customers who remain on non-negotiated contracts are known as franchise customers and are subject to a suite of regulated tariffs. Customers who choose to enter into alternative contract arrangements with ActewAGL Retail or other electricity retailers are known as non-franchise customers.

The Commission released its final report and price direction for the 2012–14 period in June 2012, setting a price path for the ensuing two years.<sup>1</sup> The price direction coincided with the commencement of the Australian Government’s carbon pricing legislation, the *Clean Energy Act 2011*, which came into force on 1 July 2012.

In 2012 the Commission modified the energy purchase cost (EPC) component of the Commission’s building-block methodology to account for the uncertainty about whether there would be a price on carbon attached to electricity generation. This uncertainty resulted in the introduction of new over-the-counter (OTC) contracts that priced electricity on a carbon-exclusive basis and reduced trading in the ASX electricity futures contracts for 2012–13. This change led the Commission to use carbon-exclusive OTC contracts typically purchased by electricity retailers to provide its forward price in the EPC model.

The Commission committed to revisiting this change prior to the release of the 2013–14 price adjustment. In April 2013, the Commission released an information paper on the EPC. The paper noted the ongoing uncertainty about the continuance of the price on carbon and hence the appropriateness of returning to the ASX futures market as a source of the forward price for electricity. Thus, the Commission has decided to retain use of over-the-counter data provided by ICAP as the basis for its EPC methodology for the 2013–14 price adjustment.<sup>2</sup>

Section 2 of this report outlines the 2013–14 price-adjustment process, including a description of the Commission’s regulated retail price building-block methodology. It also presents the Commission’s conclusions from the EPC information paper. Section 3 provides an analysis of an incumbent retailer’s efficient costs. In the penultimate section, the Commission presents its final decision on the regulated retail electricity price adjustment for 2013–14. The final section of this report considers the impact of the Commission’s final price adjustment decision on annual customer bills.

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<sup>1</sup> ICRC, 2012.

<sup>2</sup> ICRC, 2013.

## 2 2013–14 price adjustment process

### 2.1 Price adjustment requirements

The terms of reference require the Commission to provide a ‘price direction for the supply of electricity to franchise customers for the period 1 July 2012 to 30 June 2014 with provision where appropriate for a review by 30 June 2013’.<sup>3</sup>

In the 2012–14 final decision, the Commission outlined the requirements for the 2013–14 annual price adjustment as follows:

- ActewAGL Retail to submit to the Commission on or before 10 May 2013 the following information:
  - calculation of the consumer price index (CPI) adjustment from 2012–13 to 2013–14
  - calculation of costs associated with achieving environmental objectives for 2013–14, including calculation of Large-scale Renewable Energy Target (LRET), Small-scale Renewable Energy Scheme (SRES) and ACT energy efficiency scheme costs, and any proposed adjustments
  - full accounting of all proposed pass-through costs
- ActewAGL Retail to submit to the Commission for verification the updated networks costs for the franchise customer load as soon as they are approved by the Australian Energy Regulator (AER)
- the Commission to determine energy purchase cost component based on data available to 31 May 2013 and energy losses based on Australian Energy Market Operator (AEMO) data.

Based on this information, the Commission will determine the X factor and the percentage by which the weighted average price cap may adjust. The Commission will provide its direction to ActewAGL Retail by 7 June 2013.<sup>4</sup>

### 2.2 Energy purchase cost

The final report also stated that:

[T]he Commission will undertake a review of the energy purchase cost methodology where it believes that market developments in relation to energy purchasing arrangements have changed such that the current methodology of determining energy purchase costs is no longer appropriate. Should a review be deemed necessary, the Commission will undertake a public process based on the release of an issues paper and/or technical working paper, and draft and final reports. The development of any

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<sup>3</sup> The terms of reference are provided in Appendix 1.

<sup>4</sup> ICRC, 2012: 31–32.

revised methodology would take place within the confines of the existing energy purchase cost model.<sup>5</sup>

The purpose of including the option of a review of the EPC methodology was to allow the Commission to address any further market developments, including in response to any persistence of political risk related to the future existence of and the level of a price on carbon. The Commission limited the scope of any review to the most appropriate data source: either market data (that is, ASX from d-cyphaTrade) or over-the-counter data (that is, OTC from ICAP) within the Commission's model. It is important to note that the Commission committed to retaining the existing EPC model for the 2013–14 price adjustment as part of the two-year price direction.

The EPC information paper addressed whether a review of the Commission's methodology was required. It concluded that the data source should remain unchanged. There have been no significant changes in the forward electricity market since the introduction of the price on carbon that would justify altering the data source used to assess the futures price component of the EPC model. Therefore, the Commission decided that a formal review of the energy purchasing arrangements within the EPC model was not required. That is, the ICAP carbon-exclusive data should be used for the 2013–14 price reset.

A full justification of the Commission's decision is contained in the information paper.

## 2.3 Price adjustment for 2013–14

The Commission's 2012–14 final decision set the adjustment process. This is reproduced in Table 2.1.

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<sup>5</sup> ICRC, 2012: 33.

**Table 2.1 2013–14 price adjustment process**

<b>Component</b>	<b>Method</b>
Energy purchase cost (\$/MWh)	As determined using the existing energy purchase cost methodology (subject to revision through the mid-term review – see below)
LRET and SRES costs (\$/MWh)	2013–14 estimates from ActewAGL Retail, which are verified and applied using the Commission’s methodology
Energy losses (\$/MWh)	Determined by the Commission based on AEMO’s reported DLF and MLF for 2013–14
Energy contracting cost (\$/MWh)	$0.81 \times (1 + \text{CPI})$
NEM fees (\$/MWh)	$0.81 \times (1 + \text{CPI})$
Retail operating costs (\$/MWh)	$11.23 \times (1 + \text{CPI})$
ACT energy efficiency scheme (\$/MWh)	2013–14 estimates from ActewAGL Retail (including any proposed 2012–13 adjustment), which are verified and applied using the Commission’s methodology
Network costs (\$/MWh)	2013–14 as determined and approved by the AER and applied by ActewAGL Retail to the franchise customer load, and subsequently verified by the Commission
Cost pass-through (\$/MWh)	Cost pass-through proposed by ActewAGL Retail and verified by the Commission
Retail margin	5.4% on total costs

Source: ICRC, 2012: 32.

## 3 Analysis of efficient costs

This section details the regulated retail price adjustment calculation for 2013–14. It is based on a cost-index methodology which aggregates the efficient costs of the incumbent retailer. The final result is applied to the weighted average price cap formula in the price determination.

The section summarises the calculation of each component in the cost index along with that of the CPI adjustment to apply in 2013–14. The CPI adjustment is used to escalate energy contracting costs, energy losses and retail operating costs established in the cost index.

### 3.1 Consumer price index adjustment

The Commission calculates the CPI adjustment (the percentage change in the CPI) using the following formula, populated with the Australian Bureau of Statistics all groups index for the weighted average of eight capital cities:<sup>6</sup>

$$\Delta\text{CPI}_t = \frac{\text{CPI}_{\text{Mar}(t-2)} + \text{CPI}_{\text{Jun}(t-2)} + \text{CPI}_{\text{Sept}(t-1)} + \text{CPI}_{\text{Dec}(t-1)}}{\text{CPI}_{\text{Mar}(t-3)} + \text{CPI}_{\text{Jun}(t-3)} + \text{CPI}_{\text{Sept}(t-2)} + \text{CPI}_{\text{Dec}(t-2)}} - 1$$

The CPI adjustment to apply in 2013–14 is 1.76 per cent.

### 3.2 Energy purchase cost

The EPC is the cost incurred by the incumbent retailer in purchasing electricity from the wholesale market to supply customers on regulated retail tariffs. Included in the EPC are the costs associated with hedging the risks inherent in the wholesale electricity market. The EPC model has five components: the forward price, the load shape, the load ratio, the forward price margin and the cost of carbon.

The forward price represents the cost of purchasing electricity futures contracts as part of a prudent electricity retailer's hedging strategy. This occurs in advance of the time the electricity is supplied to end users. The Commission's model multiplies the forward price by an uplift factor in an attempt to ensure that the retailer is compensated for the risks it faces. The Commission in 2010 adopted an extremely conservative hedging strategy by assuming forward contracts are purchased at a margin above the historic maximum load.

The load shape, the load ratio and the forward price margin are used to calculate the uplift factor. The load shape measures the extent to which the spot price correlates with the electricity load. The load ratio is the ratio of the maximum half-hourly load to the

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<sup>6</sup> Australian Bureau of Statistics, 2013.

average load. The forward price margin is the assumed percentage mark-up of the forward price compared to the average spot price.

The final component is the cost of carbon. It measures the impact of the Australian Government’s carbon pricing legislation on wholesale electricity prices. A full derivation of its inclusion in the EPC model can be found in Appendix 4 of the Commission’s 2012–14 final decision.

The following equation presents the Commission’s EPC model as applied over the 2012–14 period:

$$EPC_s^C = FP_s \times [(1 - M_s) \times LS_s + M_s \times LR_s] + C_s$$

$$EPC^C = \sum_{i=1}^4 w_s \times EPC_s$$

where:

- $EPC_s^C$  is the EPC in quarter  $s$ .
- $EPC^C$  is the annual EPC.
- $FP_s$  is the forward price.
- $M_s$  is the forward price margin.
- $LS_s$  is the load shape.
- $LR_s$  is the load ratio.
- $C_s$  is the cost of carbon.
- $w_s$  is the load weight.
- Subscript  $s$  is an index representing the quarter.

The portion in square brackets,  $[(1 - M_s) \times LS_s + M_s \times LR_s]$ , is the uplift factor for each quarter  $s$ . It is not applied to the cost of carbon as it is assumed that the cost of carbon affects all prices, both forward and spot, equally.

### 3.2.1 Forward price

The forward price is calculated using carbon-exclusive contracting data provided by ICAP. The forward price for 2013–14 has been calculated, as required by the Commission’s 2012–14 final decision, over the 14-month period from 1 April 2012 to 31 May 2013. ICAP provides annual financial year contract data, while the Commission’s model is constructed on a quarterly timeframe. Because of this difference, the Commission needs to adopt a single annual forward price for the relevant financial year rather than individual quarterly prices.

Table 3.1 shows the forward prices for each calendar year quarter for the 2012–13 and 2013–14 financial years, as calculated by the Commission.

**Table 3.1 Quarterly forward prices for 2012–13 and 2013–14**

Year	Q3	Q4	Q1	Q2
2012–13	40.69	40.69	40.69	40.69
2013–14	39.77	39.77	39.77	39.77

Source: Commission's calculations based on ICAP, n.d.

### 3.2.2 Load shape

The load shape captures the relationship between the spot price and electricity load. The load shape is calculated using New South Wales spot prices and the net system load profile for ActewAGL Distribution, both reported by AEMO.

An implication of moving to carbon-exclusive OTC contracts is the need to base all load shape calculations after 1 July 2012 on the carbon-exclusive price. This will ensure inter-temporal consistency within the EPC model. Hence for the 2013–14 price adjustment, the Commission subtracted the cost of carbon for 2012–13 from all half-hour spot prices before calculating the load shape.

The calculation of the quarterly average load shape for 2012–13 and 2013–14 is shown in Table 3.2.

**Table 3.2 Quarterly average load shape for 2012–13 and 2013–14**

Year	Q3	Q4	Q1	Q2
2012–13	1.126	1.102	1.273	1.135
2013–14	1.120	1.096	1.246	1.125

Source: Commission's calculations using data from AEMO, n.d., *Load Profiles* and AEMO, n.d., *Aggregated Price and Demand Data Files*.

### 3.2.3 Load ratio

The load ratio for each quarter is calculated as the maximum of the observed ratio of the quarterly maximum load to the quarterly average load using AEMO data. To complete the calculation of the load ratio the Commission adds 0.1 to the observed maximum as it may be less than the expected maximum.

The load ratio for 2012–13 and 2013–14 is shown in Table 3.3.

**Table 3.3 Quarterly load ratio for 2012–13 and 2013–14**

Year	Q3	Q4	Q1	Q2
2012–13	2.027	2.272	2.540	2.296
2013–14	2.027	2.589	2.540	2.296

Source: Commission's calculations using data from AEMO, n.d., *Load Profiles*.

### 3.2.4 Load weights

Quarterly load weights are required to calculate the EPC. The load weight for each quarter is equal to the historic average load in that quarter divided by the sum of the historic average load for all four quarters. The historic average load for a quarter is the simple average of the loads for that quarter for the period 2003–04 through 2012–13. The load used is the net system load profile for ActewAGL Distribution as reported by AEMO. The quarterly load weights for 2012–13 and 2013–14 are shown in Table 3.4.

**Table 3.4 Quarterly load weights for 2012–13 and 2013–14**

Year	Q3	Q4	Q1	Q2
2012–13	0.321	0.202	0.199	0.279
2013–14	0.321	0.201	0.197	0.281

Source: Commission's calculations using data from AEMO, n.d., *Load Profiles*.

### 3.2.5 Cost of carbon

The cost of carbon is determined in accordance with the Commission's 2012–14 final decision. The cost of carbon is equal to the price on carbon multiplied by the emissions-intensity factor.

AEMO calculates and reports the daily emissions intensity as the carbon dioxide equivalent intensity index measured in tonnes of carbon dioxide equivalent gas emitted per megawatt hour (t CO<sub>2</sub>-e/MWh). The Commission has applied the same 14-month averaging period for determining the emissions-intensity factor as was done for the forward price for electricity. The emissions-intensity factor is the average of the daily emissions intensity as reported by AEMO. As required by the Commission's 2012–14 final decision, the NEM daily emissions-intensity index has been used.

The price on carbon for 2013–14 is \$24.15.<sup>7</sup> Table 3.5 presents the cost of carbon calculations for 2012–13 and 2013–14.

**Table 3.5 Cost of carbon for 2012–13 and 2013–14**

Year	Price on carbon (\$/t CO <sub>2</sub> -e)	NEM emissions-intensity factor (t CO <sub>2</sub> -e/MWh)	Cost of carbon (\$/MWh)
2012–13	23.00	0.92	21.18
2013–14	24.15	0.88	21.26

Sources: *Clean Energy Act 2011*; AEMO, 2013a.

If the price on carbon is no longer applicable for the whole of the 2013–14 financial year or parts thereof, due to legislative changes, the Commission will deem such an

<sup>7</sup> *Clean Energy Act 2011*.

event as a trigger event under the *Independent Competition and Regulatory Commission Act 1997* for a variation to the 2012–14 price direction.

### 3.2.6 Energy purchase cost for 2012–13 and 2013–14

Table 3.6 and Table 3.7 show the quarterly calculation of the EPC for 2012–13 and 2013–14, respectively.

**Table 3.6 Energy purchase costs for 2012–13**

Components	Q3	Q4	Q1	Q2
Forward price (\$/MWh) (A)	40.69	40.69	40.69	40.69
Load shape (B)	1.126	1.102	1.273	1.135
Load ratio (C)	2.027	2.272	2.540	2.296
Forward price margin (D)	0.050	0.050	0.050	0.050
Uplift factor (E= (1 – D)× B + D × C)	1.171	1.160	1.336	1.193
Energy purchase cost (\$/MWh) (A × E)	47.64	47.22	54.36	48.57

Source: ICRC, 2012: 24.

The quarterly load weights from Table 3.4 are multiplied by the quarterly EPC in Table 3.6 and summed to give the 2012–13 annual carbon-exclusive EPC of \$49.14/MWh. The cost of carbon of \$21.18/MWh was added to the carbon-exclusive EPC to provide the 2012–13 carbon-inclusive EPC of \$70.32/MWh.

**Table 3.7 Energy purchase costs for 2013–14**

Components	Q3	Q4	Q1	Q2
Forward price (\$/MWh) (A)	39.77	39.77	39.77	39.77
Load shape (B)	1.120	1.096	1.246	1.125
Load ratio (C)	2.027	2.589	2.540	2.296
Forward price margin (D)	0.050	0.050	0.050	0.050
Uplift factor (E= (1 – D) × B + D × C)	1.165	1.170	1.311	1.184
Energy purchase cost (\$/MWh) (A × E)	46.33	46.55	52.13	47.07

The quarterly load weights from Table 3.4 are multiplied by the quarterly EPC in Table 3.7 and summed to give the 2013–14 annual carbon-exclusive EPC of \$47.73/MWh. The cost of carbon of \$21.26/MWh is added to the carbon-exclusive EPC to provide the annual carbon-inclusive 2013–14 EPC of \$68.99/MWh. The carbon-inclusive EPC for 2013–14 has fallen by \$1.33/MWh from 2012–13.

### 3.3 Large-scale Renewable Energy Target and Small-scale Renewable Energy Scheme costs

LRET and SRES costs are two of the three costs incurred in achieving environmental objectives. As required by the Commission’s 2012–14 final decision, ActewAGL Retail submitted its updated LRET and SRES costs for 2013–14 to the Commission on 10 May 2013. ActewAGL Retail submitted a forecast cost for 2013–14 of \$11.66/MWh, using the methodology established in the 2012–14 final decision.

The LRET and SRES costs for 2012–13 and 2013–14 are summarised in Table 3.8.

**Table 3.8 LRET and SRES costs for 2012–13 and 2013–14 (\$/MWh)**

	2012–13	2013–14
LRET	4.24	4.44
SRES	5.59	5.10
Cost adjustment from previous year	1.57	2.12
<b>Total cost</b>	<b>11.40</b>	<b>11.66</b>

Source: Commission calculations from ICAP, n.d. and ActewAGL Retail, 2013.

The price of large-scale generation certificates (LGCs) for calendar year 2013 is \$43.59. The price of LGCs for calendar year 2014 is \$36.14 and increases to \$39.75 when adjusted by 10 per cent for the opportunity cost of holding certificates over a 12-month period.<sup>8</sup> The renewable power percentage (RPP) for 2013 is 10.65 per cent and is estimated for 2014 at 9.46 per cent.<sup>9</sup> The combination of the LGC price and the relevant RPPs results in an LRET allowance for 2013–14 of \$4.44/MWh.

For the SRES, the price of small-scale technology certificates (STCs) for calendar year 2013 is \$32.24. The price of STCs for calendar year 2014 is \$32.22, which becomes \$35.44 when adjusted for the holding cost. The small-scale technology percentage (STP) for 2013 is 19.70 per cent and is estimated for 2014 at 8.98 per cent.<sup>10</sup> The combination of the STC price and the relevant STPs results in an SRES allowance for 2013–14 of \$5.10/MWh.

An adjustment of \$2.12/MWh to the 2012–13 allowance due to the difference between the forecast and actual 2013 STP and RPP is also included in the 2013–14 LRET and SRES cost component. This allowance includes an adjustment for the opportunity holding cost.

The LRET and SRES cost component to be included for 2013–14 is \$11.66/MWh. This is \$0.26/MWh more than in 2012–13.

<sup>8</sup> The average LGC price for the period 1 July 2011 to 31 May 2012 is used as an estimate for the 12-month period. The same approach is taken to calculate the STC price.

<sup>9</sup> Clean Energy Regulator, 2013a.

<sup>10</sup> Clean Energy Regulator, 2013b.

### 3.4 Energy losses

Energy is lost in transporting electricity from generators to households and businesses via transmission and distribution networks. These losses impact on the price paid for electricity by the incumbent retailer in two ways. First, the spot price is the price of electricity at the so-called reference node in Western Sydney. Electricity consumed in the ACT is priced at the point of connection, or node, between the national transmission network and the ACT distribution network. This price is determined by applying a marginal loss factor to the spot price. The marginal loss factor reflects the energy lost in the transmission network in transporting energy to the ACT relative to the losses involved in providing energy to the reference node.

Secondly, the losses in the distribution network that takes electricity from the ACT node to the customer's premises impose a cost on the incumbent retailer, because it must purchase more electricity than it is able to sell. The loss factors are calculated by AEMO and are used by all regulators to determine the energy loss allowances where regulated tariffs still apply.

The distribution loss factor as reported by AEMO for 2013–14 is 1.0490.<sup>11</sup> The transmission marginal loss factor as reported by AEMO for 2013–14 is 0.9971.<sup>12</sup> These loss factors are combined and applied to the EPC and LRET and SRES costs to yield the energy loss cost component to be included for 2013–14, which is \$3.91/MWh.

### 3.5 Energy contracting cost

Energy trading and management costs represent the costs incurred by the incumbent retailer in managing an electricity trading desk. An electricity trading desk is necessary to manage electricity purchases, which are typically bought using a forward-looking portfolio approach, and the associated financial risks.

The energy contracting cost allowance is adjusted by annual changes in the CPI. The Commission will grant an allowance of \$0.82/MWh for energy trading and management costs for 2013–14. This is based on an adjustment of the 2012–13 cost allowance for movements in the CPI.

### 3.6 National Electricity Market fees

The NEM is managed by AEMO, which is funded through user fees that are ultimately borne by customers. The fees cover a range of functions provided by AEMO that are necessary for the safe and reliable delivery of electricity to all consumers.

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<sup>11</sup> AEMO, 2013b: 18.

<sup>12</sup> AEMO, 2013c: 35.

The cost allowance for NEM fees is adjusted by annual changes in the CPI. The Commission will grant an allowance of \$0.82/MWh for NEM fees for 2013–14. This is based on an adjustment of the 2012–13 cost allowance for movements in the CPI.

### 3.7 Retail operating costs

Retail operating costs are the costs incurred by the incumbent retailer in providing retail services to regulated customers. These costs include:

- billing services, including meter reading;
- call centre costs;
- customer information costs (including sales and marketing costs); and
- general operating overhead costs.

The retail operating cost allowance is adjusted by annual changes in the CPI. The Commission will grant an allowance of \$11.43/MWh for retail operating costs for 2013–14. This is based on an adjustment of the 2012–13 cost allowance for movements in the CPI.

### 3.8 The ACT Government’s Energy Efficiency Scheme

The ACT Government’s Energy Efficiency Scheme is the third cost incurred in achieving environmental objectives. The methodology is based on the costs from the regulatory impact statement accompanying the *Energy Efficiency (Cost of Living) Improvement Act 2012*.<sup>13</sup>

For 2012–13, the Commission included an allowance of \$1.12/MWh to recover the costs of the Energy Efficiency Scheme. This amount was based on estimates in the regulatory impact statement. ActewAGL Retail has requested an additional \$0.12/MWh to recover its actual costs over the period 1 January 2013 to 30 June 2013. The Commission allowed for an adjustment of this nature in the 2012–14 final decision. ActewAGL provided evidence that its actual costs in 2012–13 were \$1.24/MWh. The Commission has considered the evidence provided by ActewAGL and includes the additional \$0.12/MWh as part of 2013–14 electricity price adjustment.

Using the methodology determined by the Commission, ActewAGL Retail has requested an allowance of \$3.63/MWh for 2013–14 Energy Efficiency Scheme costs. ActewAGL Retail has provided details on the make-up of these costs and their prudence and efficiency. ActewAGL Retail has been implementing the Energy Efficiency Scheme only since 1 January 2013. At this time, the Commission is not in a position to adequately assess ActewAGL Retail’s proposed costs. The Commission notes that these costs may be expected to rise through the life of the scheme as more

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<sup>13</sup> Environment and Sustainable Development Directorate, 2012.

costly measures are implemented. The Commission also notes that the costs granted for 2012–13 were for half a year, while those for 2013–14 are for a full year.

The Commission will therefore include ActewAGL’s proposed \$3.63/MWh in the 2013–14 electricity price adjustment. Should the Commission be involved in setting a regulated tariff for 2014–15 and beyond, it will assess the prudence and efficiency of the costs of implementing the Energy Efficiency Scheme.

The Commission’s final decision is to include a total allowance of \$3.75/MWh to recover the costs of the ACT Government’s Energy Efficiency Scheme in 2013–14.

### **3.9 Network costs**

Transmission and distribution network costs are the costs paid by the retailer to transport electricity over the transmission and distribution networks. Transmission and distribution charges are determined by the AER and released each year in early June.

Based on the annual change in transmission and distribution charges determined by the AER, ActewAGL Retail’s network costs for 2013–14 will increase by 5.06 per cent, rising from \$84.04/MWh in 2012–13 to \$88.29/MWh in 2013–14.

### **3.10 Retail margin**

The retail margin represents the return the incumbent retailer earns on the investment it must undertake to provide retail services. Without a retail margin, the incumbent retailer would be unable to attract the funds needed to provide those services. In its 2012–14 final decision, the Commission held the allowed retail margin constant at 5.4 per cent over the two years. On this basis, the Commission has determined a retail margin of \$10.24/MWh for 2013–14.

## 4 Final decision on cost components

Table 4.1 sets out the Commission's final decision on the cost components used to determine the change in the regulated retail electricity price for 2013–14, using the methodology it adopted in the 2012–14 final decision. The Commission's decision provides for a real (adjusted for inflation) increase in the regulated retail price of 1.68 per cent. This is equivalent to a nominal increase of 3.47 per cent.

The two components that drive the increase in the electricity price for 2013–14 are network costs and costs associated with the ACT Government's Energy Efficiency Scheme. There has been a small offsetting reduction in the EPC.

It is important to note that while the Energy Efficiency Scheme accounts for about a third of the 2013–14 price increase, it makes up only 2 per cent of the total cost of electricity. Much of the increase in this scheme is due to the fact that it now applies for the 12 months of 2013–14 as opposed to the six months it applied in the previous year.

The impact of the cost of carbon on the cost of energy in 2013–14 is virtually unchanged compared to 2012–13, as the small increase in the price on carbon has been offset by the decrease in the carbon emissions intensity of electricity generation.

**Table 4.1** Composition of regulated retail electricity price adjustment for 2013–14 relative to 2012–13

	2012–13 final decision	2013–14 final decision	% change
Energy purchase cost (\$/MWh)	70.32	68.99	-1.89
LRET and SRES costs (\$/MWh)	11.50	11.66	1.39
Energy losses (\$/MWh)	3.49	3.91	11.99
Energy contracting cost (\$/MWh)	0.81	0.82	1.76
NEM fees (\$/MWh)	0.81	0.82	1.76
<b>Total energy purchase cost (\$/MWh)</b>	<b>86.92</b>	<b>86.20</b>	<b>-0.83</b>
Retail operating costs (\$/MWh)	11.23	11.43	1.76
ACT Energy Efficiency Scheme costs (\$/MWh)	1.12	3.75	235.09
<b>Total retail costs (\$/MWh)</b>	<b>12.35</b>	<b>15.18</b>	<b>22.91</b>
Network costs (\$/MWh)	84.04	88.29	5.06
Total energy + retail + network costs (\$/MWh)	183.31	189.67	3.47
Retail margin (\$/MWh)	9.90	10.24	
<b>Total costs<sup>a</sup> (\$/MWh)</b>	<b>193.21</b>	<b>199.91</b>	<b>3.47</b>
<b>X factor in CPI+X on MAR in \$/MWh (%)<sup>b</sup></b>		<b>1.68</b>	

Notes: a Sums may not add up due to rounding.

b Increase in maximum allowed revenue from franchise customer.

## 5 Impacts on customers

As noted in the previous section, the Commission’s final decision will see a 3.47 per cent nominal increase in retail electricity prices for 2013–14. Table 5.1 presents estimated increases in the 2013–14 electricity bills for a range of ‘typical’ residential customers resulting from the rise in the electricity price.<sup>14</sup> A ‘small’ customer may be representative of a single person living in an apartment, an ‘average’ customer of a small family in a town house, and a ‘large’ customer of a large family in a detached house. The annual impact on these typical bills due to the price increase ranges from \$36 to \$90.

**Table 5.1 Estimated annual bill increases for residential customers**

Customer consumption type	Annual usage (kWh)	Estimated annual bill 2012–13 (\$)	Estimated annual bill 2013–14 (\$)	Change (\$)
Large	12,000	2,606	2,696	90
Average	8,000	1,818	1,881	63
Small	4,000	1,031	1,066	36

Table 5.2 presents estimates of annual bill increases for non-residential customers. The impact on a typical bill ranges from \$98 for a ‘small’ non-residential customer to \$354 for a ‘large’ non-residential customer.

**Table 5.2 Estimated annual bill increases for non-residential customers**

Customer consumption type	Annual usage (kWh)	Estimated annual bill 2012–13 (\$)	Estimated annual bill 2013–14 (\$)	Change (\$)
Large	40,000	10,210	10,564	354
Average	25,000	6,514	6,739	226
Small	10,000	2,818	2,915	98

<sup>14</sup> The Commission has no information on the reduction in electricity consumption that the Energy Efficiency Scheme has brought about and therefore cannot estimate the impact of the scheme on the bills of customers in 2013–14 who will benefit from this scheme.

# Appendix 1 Terms of reference

## **Independent Competition and Regulatory Commission (Price Direction for the Supply of Electricity to Franchise Customers) Terms of Reference Determination 2011**

### **Disallowable instrument DI2011–261**

Made under the

### **Independent Competition and Regulatory Commission Act 1997 (the Act), Section 15 (Nature of industry references) and Section 16 (Terms of industry references).**

#### **Reference for investigation under Section 15**

Pursuant to subsection 15(1) of the Act, I refer to the Independent Competition and Regulatory Commission (the ‘Commission’) the provision of a price direction for the supply of electricity to franchise customers for the period 1 July 2012 to 30 June 2014 with provision where appropriate for a review by 30 June 2013.

#### **Terms of reference for investigation under section 16**

Under the Act, section 16(1), I require that the Commission consider the following matters in relation to the conduct of the investigation:

1. The Commission should take into account the following matters:
  - a. The impact on direct electricity costs of changes in government policies and pass through of those costs to regulated prices including, but not restricted to:
    - i. the Commonwealth Government Carbon Tax;
    - ii. Commonwealth or ACT retailer obligation energy efficiency schemes;
    - iii. the Commonwealth Government’s Large and Small Renewable Energy Targets;
    - iv. the ACT Feed-in Tariff; and
    - v. any other schemes implemented to address climate change.
  - b. The efficient and prudent cost of managing risk in the cost of purchasing electricity.
  - c. The requirements of s. 20 of the Act.
  - d. Any other matters the Commission considers relevant.
2. The Commission must produce its final report in time sufficient to allow ActewAGL Retail to make any necessary changes to its billing system and to provide information on the new tariff to customers.

Andrew Barr MLA  
Treasurer  
21 September 2011

## Abbreviations and acronyms

AEMO	Australian Energy Market Operator
AER	Australian Energy Regulator
ASX	Australian Securities Exchange
CER	Clean Energy Regulator
CO <sub>2</sub> -e	carbon dioxide equivalent
Commission	Independent Competition and Regulatory Commission (ACT)
CPI	consumer price index
DLF	distribution loss factor
EPC	energy purchase cost
ICRC	Independent Competition and Regulatory Commission (ACT)
ICRC Act	<i>Independent Competition and Regulatory Commission Act 1997</i> (ACT)
LGC	large-scale generation certificate
LRET	Large-scale Renewable Energy Target
MAR	maximum allowed revenue
MLF	marginal loss factor
MWh	megawatt hour
NEM	National Electricity Market
OTC	over-the-counter
RPP	renewable power percentage
SRES	Small-scale Renewable Energy Scheme
STC	small-scale technology certificate
STP	small-scale technology percentage
t	tonnes

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