ICRC

independent competition and regulatory commission

Issues Paper

Electricity Model and Methodology Review 2018–19

Report 8 of 2018, October 2018

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The Commission has responsibilities for a broad range of regulatory and utility administrative matters. The Commission has responsibility under the ICRC Act for regulating and advising government about pricing and other matters for monopoly, near-monopoly and ministerially declared regulated industries, and providing advice on competitive neutrality complaints and government-regulated activities. The Commission also has responsibility for arbitrating infrastructure access disputes under the ICRC Act. In discharging its objectives and functions, the Commission provides independent robust analysis and advice.

The Commission's objectives are set out in section 7 and 19L of the ICRC Act and section 3 of the *Utilities Act 2000*.

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Submissions on the issues paper close on **16 November 2018.**

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Summary

In its final report for the 2017 electricity price investigation, the Commission indicated that it would undertake a review of its pricing model and methodology (Review) for the supply of electricity to small customers.

The purpose of the Review is to ensure that the Commission's pricing model is accurate, reflects current market conditions and retailer practices, and is consistent with the Commission's obligations under the *Independent Competition and Regulatory Commission Act 1997*.

This issues paper begins the consultation process for the Review. It seeks stakeholder inputs on the current pricing model and on how the Commission proposes to approach the Review. Feedback from customers, community groups, businesses, electricity retailers and other stakeholders is crucial to ensuring the Commission's Review is appropriate in scope and considers the appropriate methodology options.

The Commission's current model calculates the annual change in regulated retail electricity prices required to recover the efficient costs of supplying retail services to small customers, by building up the various cost components. These cost components begin with the cost of purchasing energy from generators (from both traditional and renewable sources), then of transmitting it to the Australian Capital Territory (ACT) over the network, then of providing retail services to ACT small customers. There is also a component for the ACT Government's Energy Efficiency Improvement Scheme (EEIS).

Some of these components are effectively outside the Commission's regulatory control. For example, the Australian Energy Regulator (AER) sets network costs, and the EEIS is an ACT Government policy. Similarly, energy losses are provided by the Australian Energy Market Operator (AEMO), having been derived from engineering calculations. The Commission considers that these cost components are not within the scope of the Review.

The two most significant cost components that fall within the Commission's regulatory oversight are some aspects of energy purchase costs and retail costs (operating costs and the retail margin). The methodology for estimating these cost components has been developed over time. While energy purchase costs are determined within the National Electricity Market (NEM), decisions must be made on data sources, appropriate allowances for high price volatility, when the retailer would purchase energy, how green costs are considered, and how all these components are mathematically integrated into a cost allowance. The methodology to estimate retail costs includes decisions on appropriate allowances for a retail margin, billing costs, administration and retail competition activities.

To ensure the Review is cost-effective, timely, and is informed by the best available regulatory practices, the Commission proposes to engage an external expert to advise

on the energy purchase cost component. In regard to the retail cost component, the Commission intends to consider findings from recent ACCC and other regulatory investigations, evolving jurisdictional approaches, and other relevant information.

The Commission will consult extensively during the Review including on this issues paper and its draft report. The draft report will provide a non-technical summary of the Commission's draft decisions for public consultation. The Commission intends to hold a public hearing following the release of the draft report to assist stakeholders in making submissions and providing feedback. The Commission also considers holding a technical workshop, depending on the nature and extent of the external expert's findings.

This Review's active, engaged and in-depth consultation process reflects the importance of feedback from customers, community groups, businesses and other stakeholders. The Commission will also accept feedback on issues not directly raised in this issues paper, but that stakeholders consider relevant and important to electricity prices for small customers in the ACT.

Table S.1 summarises how the Commission proposes to review the components of the current pricing model.

Table S.1 Current methodology and the Commission's proposed approach for the Review

Model component	Current methodology	How the Commission proposes to review
Energy purchase costs	Observed forward prices multiplied by an uplift factor to compensate for hedging costs.	Engage an external expert to advise on the current hedging strategy, data sources and how these aspects of energy purchase costs are integrated in the model with the observable market data.
National green scheme costs	Average certificate prices increased by a 10 percent holding cost, five per cent mark- up cost and an adjustment for unders/overs.	Review the holding cost and mark-up costs.
Energy losses costs	Loss factors applied to the energy purchase costs, national green costs and NEM fees.	Maintain the current approach that uses data externally determined by the AEMO.
National Electricity Market fees	Currently indexed for the change in Consumer Price Index (CPI).	Consider other options, including calculate fees using AEMO data.
Energy contacting costs	Currently indexed for the change in CPI.	Review this component as part of retail operating costs.
Retail operating costs	Indexed for the change in CPI and converted to a per megawatt hour allowance using customer numbers and energy usage.	Monitor evolving regulatory practices and available information.
Retail margin	Currently set at 5.3 per cent.	Monitor evolving regulatory practices and available information.
Energy Efficiency Improvement Scheme (EEIS) costs	Estimated using the Commission's methodology subject to a prudency and efficiency assessment.	Maintain the current approach that uses externally determined data.
Network costs	Passed-through the costs as determined by the AER.	Maintain the current approach that uses data externally determined by the AER.

1 Introduction

This Review seeks to ensure the Commission's pricing model is accurate, reflects current market conditions and retailer practices, and is consistent with the Commission's obligations under the *Independent Competition and Regulatory Commission Act 1997* (the ICRC Act).

1.1 Background

The Independent Competition and Regulatory Commission (the Commission) is a statutory body set up to regulate prices, access to infrastructure services and other matters in relation to regulated industries. The Commission is the independent regulator of the retail electricity market in the Australian Capital Territory (ACT), responsible for setting regulated retail prices for the supply of electricity to small customers on ActewAGL Retail's (AAR) regulated tariffs.

The Commission undertakes price investigations in accordance with sections 15, 16 and 17 under Part 3 of the ICRC Act, and issues Price Directions under Part 4 of the ICRC Act. The current Price Direction requires the Commission to determine the maximum prices that AAR can charge for its regulated retail tariffs from 1 July 2017 to 30 June 2020.

The Commission's 2017 investigation used a cost model to determine retail electricity prices for small customers on AAR's regulated tariffs for 2017–20. The investigation noted that this model and the method should be consistent with evolving regulatory best practice in setting regulated prices from 1 July 2020.[1] A model and methodology review (the Review) was established as a reset principle in the Commission's 2017 Price Direction for standing offer prices for the supply of electricity to small customers.

The Commission's approach for this review is to consider separately the components of the model currently used to set retail electricity prices for small customers of AAR. It will also consider how the different components of the pricing model interact and whether the Commission's overall approach is reasonable. Any changes to the model will be implemented in the regulatory period after 30 June 2020.

1.2 Purpose of the issues paper

This issues paper begins the consultation process for the Review.

The issues paper seeks stakeholder input on the current pricing model and on how the Commission proposes to approach the Review. The Commission will also accept

[1] ICRC, 2017b: 63-65

feedback on issues not directly raised in this paper, but that stakeholders believe to be relevant and important to electricity prices for small customers in the ACT.

This paper summarises each component of the current pricing model in turn. It identifies their relative contributions to the total costs and alternative approaches adopted by other regulators. This paper also outlines how the Commission proposes to review each component, and seeks stakeholder feedback on this approach.

The remainder of this paper is structured as follows:

- Chapter 2 presents the current pricing model, identifies potential alternative approaches to estimating some cost components, and sets out the Commission's proposed approach for the Review.
- Chapter 3 summarises the issues raised in this paper.

1.3 Review timeline

The closing date for submissions on the issues paper is 16 November 2018. Submissions received by the closing date will be considered by the Commission in developing the draft report and the final report.

The draft report will provide a non-technical summary of the Commission's draft decisions for public consultation.

The Commission will also consider holding a technical workshop, depending on the nature and extent of its consultant's findings.

The Commission intends to conduct a public hearing after the release of the draft report. The hearing will include outcomes and insights from any technical workshop (if one is held) and will seek broader inputs from stakeholders.

The final report will set out the methodology and outline the model the Commission proposes to use during the next price investigation in setting regulated retail prices from 1 July 2020.

The Commission proposes to adopt the timeline set out in Table 1.1.

Table 1.1 Indicative timeline for the Review

Task	Date
Release of issues paper	15 October 2018
Submissions on issues paper due	16 November 2018
Technical workshop (if required)	Early March 2019
Draft report	Late March 2019
Public hearing	April 2019
Submissions on draft report due	Early May 2019
Release of final report	May 2019

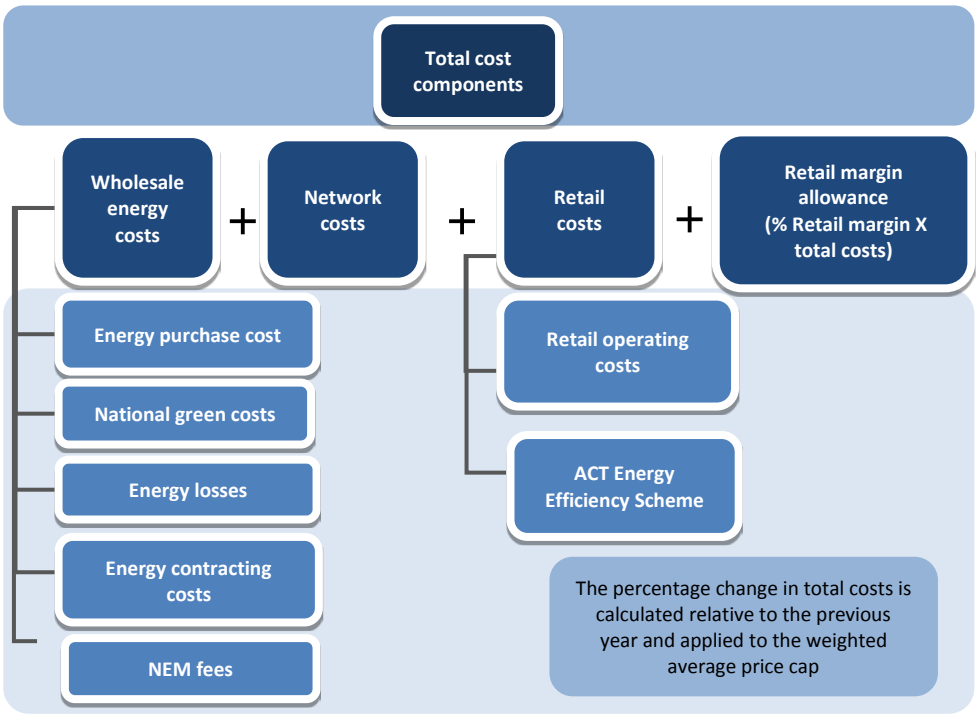
2 Commission's pricing model

2.1 Overview

The Commission's pricing model is used to determine a dollar per megawatt hour ($/MWh) cost of electricity. It does so by estimating key cost components that would be incurred by an efficient retailer in the same position as AAR when providing electricity supply services to small customers on regulated tariffs.

The model sets the cost of electricity as the sum of estimated wholesale energy purchase costs, network costs and retail costs, multiplied by a retail margin. The model is illustrated below in Figure 2.1

Figure 2.1 The Commission's pricing model



Wholesale costs are the sum of estimated energy purchase costs, Australian Government green scheme costs, energy losses, allowances for contracting costs and the National Electricity Market (NEM) fees.

Energy purchase costs are the average of forward New South Wales (NSW) electricity prices, multiplied by an uplift factor that compensates for the spot price volatility risk in the NEM. The uplift factor comprises the forward price margin, the load shape and the load ratio. The forward price margin is set to five per cent, reflecting the observation that forward prices generally exceed average spot prices. The load shape

captures the relationship between the spot price and electricity load. The load ratio takes into account extreme variability in the load.

National green scheme costs are the sum of large- and small-scale renewable certificate costs. These certificates are priced as market-traded instruments, with required holdings set by the Clean Energy Regulator (CER). The market prices of the certificates are increased by a 10 per cent holding allowance and a five per cent regulatory cost allowance. Green scheme costs are forecasts that are adjusted annually with an unders-and-overs account.

Energy losses are calculated by the Australian Energy Market Operators (AEMO). In the Commission's model, these loss factors are applied to the sum of wholesale energy purchase costs, green scheme costs and the NEM fees to account for the electricity lost in transportation from generators to customers.

Contracting costs are the estimated costs of running an electricity trading desk. The NEM fees are charged by the AEMO. The model uses Consumer Price Index (CPI) - inflated historical estimates for both.

Network costs include transmission, distribution and jurisdictional scheme costs. The Australian Energy Regulatory (AER) sets the relevant costs for Evoenergy and the Commission passes-through these costs in each year.

Retail costs are the sum of retail operating costs (set in 2014 to match an Independent Pricing and Regulatory Tribunal (IPART) benchmark, since indexed by the CPI) and the costs of complying with the ACT Government's Energy Efficiency Improvement Scheme (EEIS).

The retail margin is a percentage applied to the sum of the above costs, providing a return to the investment made by the retailer, and is set for the 2017–20 regulatory period at 5.3 per cent.

Once these cost categories are estimated, they are added together to produce an overall cost to be recovered in $/MWh. This is then used in conjunction with the total costs calculated for the previous year to produce a maximum average percentage change that AAR can apply to its regulated tariffs.

2.2 Current pricing model and the Commission's proposed approach for the Review[2]

2.2.1 Wholesale electricity costs

Energy purchase costs

Energy purchase costs are the costs incurred by retailers in purchasing electricity from the NEM.[3] Prices in the NEM are volatile and retailers adopt a range of strategies to reduce the risk of price volatility. Hedging is one strategy retailers may adopt to reduce their risk exposure. Other strategies that a hypothetical efficient retailer could adopt to reduce its risk exposure include entering long-term contracts with generators or investing in electricity generation.

The energy purchase cost component in the Commission's model accounts for 36.2 per cent of the total costs for 2018–19.

Current methodology

The Commission's current energy purchase cost model determines a benchmark cost of purchasing electricity that would be incurred by a hypothetical efficient retailer in the same position as AAR. This benchmark is based on observed market outcomes and the modelling of a conservative hedging strategy.

The Commission's energy purchase cost model compensates the hypothetical efficient incumbent retailer for the likely costs associated with spot price spikes in the volatile market. The model assumes that the retailer purchases enough forward contracts to reduce, to a negligible level, the possibility of having insufficient forward cover to meet demand at any trading interval. It ensures that the retailer is not exposed to any upside spot market risk.

The primary reason for adopting this approach is to ensure that the hypothetical efficient retailer is not potentially exposed to financial failure, which would undermine the electricity supply arrangements in the ACT.[4] Section 20(2) of the ICRC Act requires the Commission to ensure the on-going financial viability of AAR, which is both the retailer of last resort and the incumbent retailer in the ACT.

The current model has two key elements: the forward price and the uplift factor. The forward price represents the cost of pre-purchasing electricity to be delivered at a later

[2] See ICRC, 2017a: 7-41 and ICRC, 2017b: 7-37 for more details of the Commission's current model. The Commission will shortly release a mathematical summary of the model.

[3] The NEM operates as wholesale spot market interconnecting five regional market jurisdictions – Queensland, NSW (including the ACT), Victoria, South Australia and Tasmania. The NEM involves wholesale generation, and is managed by the AEMO.

[4] ICRC, 2014a: 36.

date. The uplift factor is calculated using load shape, load ratio and the forward price margin, and is applied to the forward price to reflect the retailer's hedging cost.

Forward price

The forward price of wholesale electricity in the Commission's current model is calculated using data from the Australian Stock Exchange (ASX) futures market.[5] The Commission uses average historical data as the best estimate of the forward price facing the retailer. The Commission's model applies a 23-month forward price averaging period as it may reflect the purchasing window of a prudent retailer. It also smooths out larger fluctuations in forward prices.

The Commission considered two sources of forward price data when making its 2017 decision: futures market data from the ASX and over-the-counter (OTC) contract data from ICAP. The Commission's preference was to use ASX data due to the lack of transparency inherent in the OTC market highlighted by ACCC in its retail electricity pricing inquiry report.

Uplift factor

The Commission's current energy purchase cost model allows for the retailer's costs of hedging by calculating an uplift factor. The uplift factor takes account of variability in the wholesale electricity cost resulting from both standard and extreme variability in the load profile.

The uplift factor is expressed as $LS \times (1 - M) + LR \times M$.

The forward price margin (M) captures the observation that forward prices generally exceed average spot prices. This is set at five per cent based on a data analysis undertaken by the Commission in 2014.

The load shape (LS) reflects the relationship between the spot price and the load. It estimates the extent to which the level of the load[6] and the spot prices move together, and is measured by the ratio of the load-weighted spot price to the time-weighted spot price. The weight on the load shape $(1 - M)$ reflects the general effect of load on prices. The LS is calculated using NSW spot prices and the net system load profile for Evoenergy, both reported by the AEMO.

The load ratio (LR), also often described as the load profile, is measured by the ratio of peak load to average load. The LR component can be interpreted as spikes in peak demand. It is calculated as the maximum of the observed ratio of the quarterly maximum load to the quarterly average load using the AEMO data. To complete the

[5] Daily base strip data for electricity futures are used.

[6] In the most general sense, the load is the amount of electricity on the grid at any given time, which reflects the demand from consumers.

calculation of the load ratio, the Commission adds 0.1 to the observed maximum to allow for the possibility of a higher peak.

The Commission's model estimates the energy purchase costs on a quarterly basis. Quarterly energy purchase costs are then converted to an annual average using quarterly load weights.[7] The load weight for each quarter is equal to the historical average load in that quarter divided by the sum of the historical average load for all four quarters from 2003–04.

Cost of carbon

The Commission's model incorporates an adjustment to the wholesale energy purchase cost to account for the cost of carbon. The cost of carbon was introduced to the model following the introduction of the carbon pricing scheme as the *Clean Energy Act 2011*. The scheme was abolished in July 2014. As such, the cost of carbon is set at zero in the current energy purchase cost model. An alternative would be to remove the carbon cost component from the model. Both approaches are straightforward and do not involve complex model manipulations. The outcome in either case would be also the same. As indicated in its final report on standing offer prices for the supply of electricity to small customers from 1 July 2017, the Commission will reinvestigate this matter as part of the Review.

How the Commission proposes to review the energy purchase costs

The Commission has been applying the current version of the energy purchase cost model since 2012.[8] Given the changes in the market and regulatory environment that have occurred since 2012, the model parameters should be validated against current market assumptions and conditions. The Commission considers that this Review presents an opportunity to determine if there is scope for improvement in the current methodology for setting certain aspects of energy purchase costs.

The key component of the Commission's energy purchase cost model is the hedging strategy. Hedging is considered the most commonly used financial strategy by electricity retailers to reduce the spot price volatility risk in the NEM. The Commission considers it is appropriate to continue to incorporate a hedging strategy in its model. This will be the focus of the Commission's review of this cost component.

The Commission currently uses a swap-only hedging strategy. An alternative approach could be to implement a hedging strategy that incorporates a combination of different financial derivatives.

[7] Demand for electricity varies over the year due to changes in the seasons that change the consumer behaviour. For instance, consumer demand for electricity is high during summer and winter seasons. Quarterly load weights are used to represent these changes in demand and the respective load in calculating the annual average energy purchase costs.

[8] The Commission's energy purchase cost model has evolved since 2003.

Regulatory approaches in other jurisdictions also provide some insights into alternative methodologies. The Queensland Competition Authority (QCA) employs a market hedging approach to estimate wholesale energy costs for regional Queensland. It involves simulating expected spot prices assuming that a retailer hedges the spot price by purchasing financial derivatives with contract prices represented by the ASX futures data.[9] The Office of the Tasmanian Economic Regulator (OTTER) calculates wholesale electricity costs based on a modelled wholesale electricity price, forecast standing offer customer load and loss factors.[10]

The Commission proposes to review the current energy purchase cost model as a whole. It intends to undertake a comparative assessment of energy market hedging methods employed by comparable jurisdictions as well as alternative hedging strategies such as delta hedging, static hedging and minimum variance hedging.[11] The Commission's assessment will be guided by cost implications, ease of implementation, established regulatory practice and effectiveness in managing risks.

The Commission's current energy purchase cost model is complex and technical. The Commission intends to consider a range of alternative methodologies as part of this review. As such, the Commission considers that the energy purchase cost model merits a separate investigation in the form of an individual consultation paper. The paper is planned to be released in February 2019 for stakeholder consultation.

The Commission will engage an external expert to advise the Commission's review on the energy purchase cost component.

In this issues paper, the Commission is seeking feedback from stakeholders on the current methodology as well as on the Commission's proposed approach to reviewing it. In particular, the Commission would welcome stakeholder inputs on the following issues.

[9] QCA, 2018: 29.

ds[10] OTTER determines the standing offer prices for customers on Aurora Energy's regulated tariffs. OTTER's estimation of electricity purchase costs for Aurora Energy is based on wholesale market conditions and assumptions that are different to the underlying assumptions considered in the Commission's pricing model for AAR. In particular, the electricity market in Tasmania is dominated by a single government-owned hydroelectric generator, which implies particular purchase, hedging and contracting arrangements. For this reason, OTTER's current approach only provides limited insights into this Review.

[11] Delta hedging, static hedging and minimum variance hedging are examples of strategies that energy market participants may employ to manage costs associated with market price volatility. See the full discussion in Bessembinder & Lemmon, 2002: 1347-82.

Issues for consultation:

1. Please comment on the Commission's current energy purchase cost model and its continuing appropriateness given the changes in the market environment since 2012.

2. What options could the Commission consider in reviewing its model, and why?

National green scheme costs[12]

The Large-scale Renewable Energy Target (LRET) and the Small-scale Renewable Energy Scheme (SRES) are national environmental obligations imposed by the Australian Government to create financial incentives for investment in renewable energy sources. The schemes require electricity retailers to purchase and surrender Large-scale Generation Certificates (LGC) and Small-scale Technology Certificates (STC) to the CER in percentages set by regulation each year.[13]

The costs of complying with these schemes are captured in the Commission's National green scheme cost component.

These costs make up 10 per cent of AAR's total costs for 2018–19.

Current approach

The Commission applies a market-based approach for determining efficient LRET and SRES costs. The Commission's method determines average LGCs and STCs prices based on publicly available spot price data. The Commission uses historical spot price data averaged over an 11-month period as the best estimates of the forward prices faced by the retailer. The Commission sources LGC and STC daily spot price data from ICAP.

The Commission adds 10 per cent to the average spot price to compensate the retailer for the costs it incurs in holding the certificates up to their surrender. The Commission also applies a five per cent mark-up to the average spot prices to account for administrative operating costs. Further, the Commission's approach provides for a cost

[12] Technically known as the LRET and SRES costs in the Commission's model.

[13] Renewable Power Percentage and Small-scale Technology Percentage are those annual targets to achieve national LRET and SRES targets by 2030, respectively. More information on the LRET and the SRES schemes can be found on the Clean Energy Regulator's website: http://www.cleanenergyregulator.gov.au/About/Accountability-and-reporting/administrative-reports/tracking-towards-2020-encouraging-renewable-energy-in-australia.

adjustment each financial year to account for the differences between the estimated and the actual renewable energy percentages.

LRET and SRES obligations accrue in calendar year terms while the Commission's pricing model is configured in financial year terms. As such, LRET and SRES costs per financial year are derived by averaging two calendar year estimates. The Commission uses half-yearly load weights provided by AAR to apportion costs across calendar years.

How the Commission proposes to review national green scheme costs

Complying with the LRET and SRES is mandatory. These green schemes require electricity retailers to purchase and surrender renewable certificates to the CER in percentages set by regulation. The (spot) price for certificates is determined largely by supply and demand in the wholesale market. The Commission has no discretion in determining renewable percentages or certificate prices.

Federal legislation requires compliance costs are estimated by multiplying certificate prices and the renewable energy percentages, and as such these costs are outside of the Commission's jurisdiction. The Commission does have discretion in determining associated costs, including holding costs and mark-up costs.

A cross-jurisdictional comparison indicates the Commission is the only regulator that currently compensates the regulated retailer for a holding cost and an administrative mark-up cost in determining LRET and SRES costs. The Commission notes the possibility of treating holding costs and mark-up costs as retail costs, and also the potential for timing variations in cost calculation.

As such, the Commission proposes to re-evaluate the appropriateness of including a holding cost and mark-up cost and the appropriate magnitude of any such costs.

Issues for consultation:

3. Do you have any comments or suggestions on the Commission's current approach for calculating average renewable certificate costs?
4. Should the Commission include a holding cost and administrative mark-up cost? Please give reasons.
5. If you consider that these costs should be included, how should these (holding and mark up costs) be calculated?

Energy losses

Some electricity is lost in transporting it from generators to customers via transmission and distribution networks. The energy loss factors are calculated by the AEMO.

Energy losses make up 3.3 per cent of AAR's total costs for 2018–19.

Current approach

The Commission determines the energy losses component by applying the AEMO's transmission and distribution loss factors to the energy purchase cost component, LRET and SRES costs and the NEM fees. The Commission has been applying this approach since 2014.

How the Commission proposes to review energy losses costs

Energy losses are a necessary component of the model. All regulators use the AEMO's published loss factors to determine the energy loss allowance.

The Commission's preliminary view is that the current approach for estimating energy losses is appropriate. From an initial assessment of different approaches, there is no alternative methodology that can be considered more appropriate.

The Commission considers that it would be appropriate to continue to use its current approach for estimating energy losses over the next regulatory period commencing 1 July 2020.

Issues for consultation:

6. Do you have any comments or suggestions on the current approach for estimating energy losses?

NEM fees

NEM fees are the costs of running the market institutions associated with the NEM and the ancillary service costs purchased by the NEM institutions. These costs are recovered from the NEM participants.

The cost components of total NEM fees include general participant fees, Full Retail Competition (FRC) fees, National Transmission Planner fees (NTP), Energy Consumer Australia fees (ERC) and ancillary services fees.

NEM fees make up 0.4 per cent of AAR's total costs for 2018–19.

Current approach

For 2008–09 NEM fees, the Commission adopted IPART's 2007–10 determination escalated to nominal values using the CPI index[14]. The Commission has updated this value by the changes in CPI since then.

How the Commission proposes to review NEM fees

As summarised below, there are alternative methods to estimate the NEM fee component other than the Commission's current method of indexation.

In 2013, IPART engaged Frontier Economics to calculate NEM and ancillary fees. NEM fees were calculated based on the budgeted revenue requirements of the AEMO. Ancillary fees were calculated on the average real ancillary services costs in NSW over the past ten financial years.

The QCA determined 2018–19 NEM fees and ancillary charges based on advice from ACIL Allen. ACIL Allen used the AEMO's budget and fee projections to estimate NEM management fees. Ancillary service charges were estimated using the AEMO's ancillary service payments averaged over the preceding 52 weeks.

Applying the QCA methodology would produce an estimated allowance of $0.99 per MWh for AAR for 2018–19. This is slightly higher than Commission's allowance of $0.90 per MWh for 2018–19.

Another potential approach that the Commission will consider in this review is to estimate 2020–21 NEM fees by using observed AEMO data and index the estimated value annually over a period.

Issues for consultation:

7. Do you have any comments or suggestions on the current approach for estimating NEM fees?

8. What alternatives should the Commission consider in this review? Please explain reasons why these alternatives may be appropriate.

[14] ICRC, 2008: 44; IPART, 2007:90.

2.2.2 Retail costs

Retail operating costs

Retail operating costs are the efficient costs incurred by the retailer in providing retail services to its customers.

Retail operating costs make up 5.7 per cent of AAR's total costs for 2018–19.

Current approach

In its 2003 retail electricity price determination, the Commission modelled efficient benchmark costs of electricity supply to regulated tariff customers.[15] This included an assessment of retail operating costs provided by AAR, also based on benchmark observations of other regulatory decisions. The Commission's cost structure underpinning the assessment of the retail operating cost benchmark comprised the following retail activities:

- customer care and call centre operations;
- billing and charging;
- sales and marketing, being primarily the costs of communicating the transitional regulated tariff arrangements;
- collection and default;
- administration (business overheads such as finance, human resource management and, regulatory administration); and
- retail competition activities such as churn management and advertising for new customers.

In 2014, the allowance was increased to match the IPART's 2012–13 benchmark.[16] The Commission has indexed this value since then.

The retail operating cost allowance is currently calculated by adjusting the previous year's value for the changes in the CPI and converting it to an allowance per MWh using customer numbers and energy usage. In its most recent decision for 2018–19, the Commission determined a per customer allowance of $123.37. This is equivalent to an allowance of $14.58 per MWh.

How the Commission proposes to review retail operating costs

This Review provides an opportunity to determine if there is scope for improvement in the current methodology for setting the retail operating cost allowance.

There is currently no single approach to estimating the retail operating cost allowance across Australian regulators. Typically, regulators have used either a bottom-up approach, a benchmarking approach, or some combination of the two to determine

[15] ICRC, 2003:13.

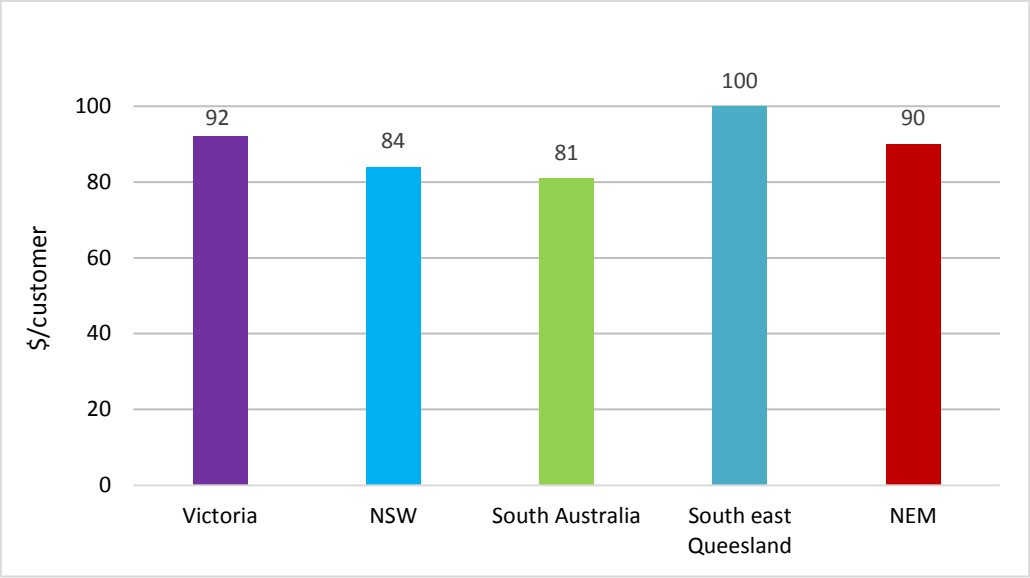
[16] ICRC, 2014b: 54.

efficient retail operating costs for regulated businesses. As outlined above, the Commission's current approach is effectively a combination, where bottom-up costs were initially established, and have since been varied by comparison with appropriate benchmarks.

The bottom-up approach relies on disaggregated cost information provided by retailers. The individual cost elements are separately analysed on the basis of prudency and efficiency, then combined together to deliver a total cost allowance. Determining the efficiency of the cost estimates provided by retailers is challenging, and typically requires independent experts to assist with the evaluation, or a sufficient number of comparable retailers to allow for the comparison of costs, or a combination of both approaches.

The recent Australian Competition and Consumer Commission (ACCC) report[17] undertook a bottom-up approach to cost analysis, and identified substantial variation in retail operating costs by geography, jurisdiction and firm size across the NEM region for 2016–17. The ACCC report dealt with the challenge of identifying efficient costs in its bottom-up approach by comparing the costs for a large number of retailers. Figure 2.2 below presents the ACCC's comparison of retail operating costs by state.

Figure 2.2 ACCC cost-to-serve by state, 2016–17, ($ per residential customer, excluding GST)



Note: 'Cost-to-serve' is equivalent terminology of 'retail operating costs'. NEM refers to the average.
Source: ACCC (2018).

A benchmarking approach can be applied by comparing retail operating costs against allowances in other regulatory decisions or against publically available information, such as in retailers' annual reports. Defining the benchmark retailer is one key challenge for this method, as the operating conditions under which firms operate

[17] ACCC, 2018: 221.

frequently vary substantially on the basis of geography, industry segment, jurisdiction and over time. Once defined, the key challenge becomes the availability of comparable information.

In considering benchmarking for the ACT, the Commission notes that retail electricity prices are currently regulated only in the ACT, regional Queensland and Tasmania. The Commission notes that further information from currently-underway analyses by the ACCC, AER and others may be a useful source of comparative information and analysis. The ACCC, in its recent report, has recommended replacing the current standing offer and standard retail contracts with a default market offer at or below a price set by the AER. The Federal Government has directed the ACCC to report on prices, profits and margins in the supply of electricity in the NEM, with the first report due by 31 March 2019.[18] Further, the Australian Energy Market Commission (AEMC) and the Essential Services Commission (ESC) are currently considering retail electricity pricing methodologies.

The Commission's current approach, using a hybrid of bottom-up and benchmarked costs, is long-established,[19] has been widely consulted upon[20], and provides substantial regulatory certainty. While this methodology currently reflects a best practice regulatory approach, the Commission notes the work currently being undertaken by a number of Australian regulators referred to above, which may inform, the Commission's consideration of how it implements its methodology.

During this review, the Commission will monitor evolving regulatory practice. The Commission notes the ACCC found different NEM retailers included different retail cost elements, and understands that these elements may vary from those included in the Commission's current cost allowance (outlined earlier in this section). Consequently, the Commission is seeking stakeholder input on the components of retail operating costs.

In its next price investigation, the Commission will consider the appropriate inputs to its methodology. Its analysis of inputs and data sources will be informed by the findings from current regulatory investigations and analysis, including the work being undertaken by, amongst others, the ACCC and AER. Findings relevant to the model inputs could include the identification of suitable benchmarks and the individual components of retail operating costs.

[18] https://www.accc.gov.au/media-release/accc-to-monitor-and-report-on-electricity-prices.

[19] ICRC, 2003: 12-13.

[20] ICRC, 2017b: 25-29.

Issues for consultation:

9. Do you have any comments or suggestions on the scope of retail activities included in the Commission's current cost allowance?

10. For its comparative assessment of the retail costs for electricity retailers and retailers in other industries, the Commission seeks stakeholder inputs on comparable businesses and industries with retail activities and costs similar to an efficient electricity retailer.

11. Does the Commission's current approach for setting the retail operating cost allowance remain appropriate, and are there alternative approaches that should be considered in this Review

Retail Margin

The retail margin compensates the retailer for managing its services and for the investments it has made in providing electricity to customers such as IT and billing systems.

The retail margin accounts for five per cent of AAR's total costs for 2018–19.

Current approach

As part of the Commission's 2014 price investigation, the retail margin was increased from 5.4 per cent to 6.04 per cent drawing on research undertaken by the IPART in 2013.[21]

Given the substantial increases in other cost components, especially the energy purchase costs, the Commission's final decision in 2017 was to set the retail margin at 5.3 per cent for the 2017–20 regulatory period. In doing so, the Commission noted that this figure is within the range identified in the Commission's 2014 decision based on the work undertaken by SFG[22] for the IPART in 2013.

How the Commission proposes to review the retail margin

The Commission notes the process by which a point in an appropriate range is selected may also be sensitive to ongoing regulatory investigations and analyses by National and State regulators. The ACCC's reporting[23] on retail electricity prices, profits and

[21] IPART, 2013: 94.

[22] SFG, 2013: 5-15.

[23] https://www.accc.gov.au/media-release/accc-to-monitor-and-report-on-electricity-prices.

margins may be of particular relevance. The ACCC's first report is due by 31 March 2019.[24] Further, as noted above, the AEMC and the ESC are currently considering retail electricity pricing methodologies.

In regard to the retail margin, the Commission intends to consider findings and information from recent ACCC and other regulatory investigations, evolving jurisdictional approaches, and other relevant information.

Issues for consultation:

12. Please comment on the Commission's current approach for setting the retail margin and alternative approaches that should be considered in this Review.

EEIS costs

The ACT Government's EEIS places a mandatory obligation on all active retailers in the ACT to promote energy efficiency measures in households and small businesses. The retailer's costs of complying with the scheme are captured in the EEIS cost allowance.

The EEIS compliance costs make up 1.6 per cent of AAR's total costs for 2018–19.

Current approach

The Commission determines the EEIS cost allowance using the Commission's methodology and cost estimates provided by AAR, subject to a forward-looking prudency and efficiency assessment. Since the Commission's methodology relies on forecast and estimated costs in advance of the actual cost being incurred, provision is made for an ex-post adjustment.

How the Commission proposes to review EEIS costs

The EEIS compliance costs are discrete, determined based on the energy saving obligations as set out in the EEIS legislation[25] and reconciled against actual costs incurred by AAR. The Commission's role is limited to reviewing AAR's compliance costs against prudency and efficiency criteria. As the methodology is set to reflect AAR's legislative requirements, there is little scope for the Commission to alter the current approach.

[24] https://www.accc.gov.au/media-release/accc-to-monitor-and-report-on-electricity-prices.

[25] https://www.environment.act.gov.au/energy/smarter-use-of-energy/energy_efficiency_improvement_scheme_eeis/legislation.

As such, the Commission considers that it would be appropriate to maintain its current approach for estimating EEIS costs for the next regulatory period commencing 1 July 2020.

Issues for consultation:

13. Do you have any comments or suggestions on the current approach?

2.2.3 Network costs

Network costs include transmission, distribution and jurisdictional scheme costs. These costs are those associated with transporting energy from generators to the ACT's small customers. Network costs are determined by the AER following extensive investigation and consultation.

Network costs make up 37.3 per cent of AAR's total costs for 2018–19.

Current approach

The Commission currently passes through the network costs determined by the AER without review or alteration, as the determination of these costs lies outside the Commission's control.

Commission's proposed approach for the review

The AER sets network prices by determining the maximum revenue that a network business (Evoenergy in the case of the ACT) is able to recover from customers each year.

As these costs are the jurisdiction of another regulator, the Commission has no discretion in determining network costs.

The Commission considers that it would be appropriate to maintain the current approach for the next regulatory period from 1 July 2020.

3 Issues for consultation: Summary

The Commission welcomes feedback on the current pricing model and the Commission's proposed approach to conduct its review of the model and methodology. In particular, the Commission would welcome stakeholder inputs on the following key issues.

1. Please comment on the Commission's current energy purchase cost model and its continuing appropriateness given the changes in the market environment since 2012.

2. What options could the Commission consider in reviewing its energy purchase cost model, and why?

3. Do you have any comments or suggestions on the current approach for calculating average renewable certificate costs for the Commission's allowance of National green scheme costs?

4. Should the Commission include a holding cost and administrative mark-up cost in its calculation of National green costs? Please give reasons.

5. If you consider that these costs should be included, how should these (holding and mark up costs) be calculated?

6. Do you have any comments or suggestions on the current approach for estimating energy losses?

7. Do you have any comments or suggestions on the current approach for estimating NEM fees?

8. What alternatives should the Commission consider in this review of NEM fees? Please explain reasons why these alternatives may be appropriate.

9. Do you have any comments and suggestions on the scope of activities included in the Commission's current retail operating cost allowance?

10. For its comparative assessment of the retail costs for electricity retailers and retailers in other industries, the Commission seeks stakeholder inputs on comparable businesses and industries with retail activities and costs similar to an efficient electricity retailer.

11. Does the Commission's current approach for setting the retail operating cost allowance remain appropriate, and are there alternative approaches that should be considered in this Review?

12. Please comment on the Commission's current approach for setting the retail margin and alternative approaches that should be considered in this Review.

13. Do you have any comments or suggestions on the Commission's current approach to estimate EEIS costs?

Abbreviations and acronyms

AAR	ActewAGL Retail
ACT	Australian Capital Territory
ACCC	Australian Competition and Consumer Commission
AEMC	Australian Energy Market Commission
AEMO	Australian Energy Market Operator
AER	Australian Energy Regulator
ASX	Australian Securities Exchange
Commission	Independent Competition and Regulatory Commission
CER	Clean Energy Regulator
CPI	Consumer Price Index
EEIS	Energy Efficiency Improvement Scheme
ERC	Energy Consumers Australia
ESC	Essential Services Commission
FRC	Full Retail Contestability
GST	Goods and Services Tax
ICRC	Independent Competition and Regulatory Commission
IPART	Independent Pricing and Regulatory Tribunal
LGC	Large-scale generation certificate
LRET	Large-scale Renewable Energy Target
MWh	Megawatt hour
NEM	National Electricity Market
NSW	New South Wales
NTP	National Transmission Planner
OTC	Over-the-counter

OTTER	Office of the Tasmanian Economic Regulator
QCA	Queensland Competition Authority
STC	Small-scale Technology Certificate
SRES	Small-scale Renewable Energy Scheme

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