

# Victorian Default Offer for domestic and small business electricity customers

Staff working paper

21 December 2018



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# 1. Introduction

The Essential Services Commission has received a terms of reference requesting that it develop a methodology and recommend a Victorian Default Offer (VDO) that will be available to residential and small business electricity customers from 1 July 2019.

The purpose of this staff paper is to receive initial feedback from interested parties on the methodology to calculate a VDO for domestic and small business electricity customers. It has been prepared to provide stakeholders with background and facilitate input to our review.

We will hold workshops in late January 2019 to inform stakeholder responses to this paper.

A key objective for commission staff is to develop a methodology that can be replicated by stakeholders. We will work to provide transparency throughout our consultation process to facilitate an understanding of the commission's possible recommendations for the VDO.

## 1.1. Terms of reference

On 18 December 2018, the commission received the terms of reference to develop a methodology to calculate a VDO for small electricity customers in Victoria, by 3 May 2019. The VDO will: <sup>1</sup>

- be available from 1 July 2019
- be offered unconditionally by all licensed retailers to small customers
- be the price that a retailer can charge under the VDO arrangements
- be established as the basis for retail discounts
- adopt the terms and conditions for standing offers,
- be based on current marketing standards and approaches.

A VDO price will be set for each distribution zone and be based on the efficient cost to run a retail business. The price will also include an allowance for a maximum retail profit margin and a modest allowance for customer acquisition and retention costs. The VDO will not include an allowance for headroom.<sup>2</sup>

As required by the terms of reference, the commission will have regard to its objectives under the *Essential Services Commission Act 2001*, *Electricity Industry Act 2000*, findings from the

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<sup>1</sup> *Fair Pricing in the Energy Market – Terms of Reference for the Essential Services Commission*, December 2018.

<sup>2</sup> *Fair Pricing in the Energy Market – Terms of Reference for the Essential Services Commission*, December 2018.

independent review of electricity and gas retail markets in Victoria and the government's published response, and advice from relevant experts. The commission will also engage with the expert panel noted in the terms of reference.

The terms of reference are available on the commission's website.

## **1.2. Links to earlier work by the commission on a reference price**

In March 2018, the commission released a consultation paper to develop a methodology to calculate a reference price for Victoria's electricity and gas retail markets.<sup>3</sup> This work on a reference price followed the Victorian Government's final response to the recommendations of the independent review of electricity and gas retail markets in Victoria.

The commission's March 2018 consultation paper proposed a cost-based approach to develop a reference price, at that stage. The commission considered a cost-based approach met the four assessment criteria it used at the time, namely that the approach was timely, representative, transparent and well-accepted. In general, feedback on the commission's consultation paper indicated support for a cost-based approach.

Work on the reference price, including stakeholder submissions responding to the commission's March 2018 consultation paper, will be used to inform the VDO. We will build on earlier ideas and feedback from stakeholders. We note at this stage the VDO covers electricity only.

In developing a VDO, commission staff will adopt the same criteria used for the commission's reference price methodology, that is:<sup>4</sup>

- Timeliness – the approach should be implementable from 1 July 2019. This would not prevent the commission from consulting on possible refinements to the methodology or updates on the inputs after that date.
- Representative – the approach should produce results that broadly reflect costs faced by retailers efficiently operating in Victoria. This does not mean that the results would necessarily reflect the cost of an individual retailer or group of retailers.
- Transparent – the approach should be able to be understood and reproducible.
- Well accepted – the approach should rely on estimation techniques that are familiar and readily applicable (though these techniques could be enhanced in future, subject to appropriate consultation).

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<sup>3</sup> Essential Services Commission 2018. *Developing a reference price methodology – consultation paper*, March.

<sup>4</sup> Essential Services Commission 2018. *Developing a reference price methodology – consultation paper*, March.

### **1.3. Responses to the staff paper**

We invite stakeholders to make submissions in response to this staff paper.

Submissions should be made by **5pm 30 January 2019**.

Submissions, preferably in electronic format, and marked Submission to Victorian Default Offer for small electricity customers – staff working paper, should be sent by email to [RetailEnergyReview@esc.vic.gov.au](mailto:RetailEnergyReview@esc.vic.gov.au),

or by mail to:

Essential Services Commission  
Level 37, 2 Lonsdale Street  
Melbourne, Victoria 3000

Submissions will be made available on the commission's website, except for any information that is commercially sensitive or confidential. Submissions should clearly identify which information is sensitive or confidential.

### **1.4. Key timelines**

The key timelines are:

- Late January 2019 – workshops to inform stakeholder responses to this staff paper.
- 30 January 2019 – submissions on the staff paper close.
- Early-mid February 2019 – the commission will publish a VDO methodology paper, which will be informed by consultation in response to this staff paper.
- Early March 2019 – the commission will publish a draft recommendation for the VDO.
- Early May 2019 – the commission will publish its final recommendation for the VDO.

## 2. Our proposed approach to develop the Victorian Default Offer

### 2.1. What is the Victorian Default Offer?

The Victorian Default Offer (VDO) will apply from 1 July 2019, and is:

a simple, trusted and reasonably priced electricity option that safeguards consumers unable or unwilling to engage in the retail electricity market without impeding the consumer benefits experienced by those who are active in the market.<sup>5</sup>

The VDO will be a service that electricity retailers will offer unconditionally to all residential and small business customers.<sup>6</sup> The VDO price should:<sup>7</sup>

- be set for each distribution zone
- be based on the efficient cost to run a retail business
- include an allowance for a maximum retail profit margin
- include a modest allowance for customer acquisition and retention costs
- not include an allowance for headroom.<sup>8</sup>

The price that a retailer can charge under VDO arrangements will be the basis from which retail discounts will be measured.

The main difference (from a cost estimation perspective) between earlier work on the reference price and the VDO is the allowance for customer acquisition and retention costs in the VDO. We address customer acquisition and retention costs in section 3.5.

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<sup>5</sup> *Fair Pricing in the Energy Market* – Terms of Reference for the Essential Services Commission, December 2018.

<sup>6</sup> Small business customers will be defined as per Order under Section 7AA of Electricity Industry Act (15 December 2015) as any person who is not a small domestic customer whose aggregate consumption is not, or not likely to be, more than 40 MWh per annum.

<sup>7</sup> *Fair Pricing in the Energy Market* – Terms of Reference for the Essential Services Commission, December 2018.

<sup>8</sup> Headroom has been interpreted by commission staff to be consistent with the independent review panel's definition as an additional allowance that is often added to regulated retail energy prices so that regulated retail prices do not act as a barrier to entry for new retailers.

## 2.2. An approach to the Victorian Default Offer

The commission's March 2018 consultation paper considered two alternatives to calculate a reference price:

- cost-based: where a regulator determines the costs that a retailer would incur in providing its services.
- index-based: where a price is determined based on a forecast of future productivity.

The commission's reference price consultation paper proposed a cost-based approach, which was generally supported by stakeholders.<sup>9</sup> The commission considered using a cost-based approach provided for a timely, representative and transparent approach to setting the reference price.

Other economic regulators have used a cost-based approach to energy pricing. This includes the Australian Energy Regulator (AER) when setting network tariffs, Independent Competition and Regulatory Commission (ICRC) in the ACT, and the Independent Pricing and Regulatory Tribunal (IPART) in NSW. In the United Kingdom, the Office of Gas and Electricity Markets use a cost-based approach to set a default tariff cap.

Given the above, commission staff consider it is appropriate to calculate the VDO using a cost-based approach. The main costs to consider will be wholesale, network, environmental scheme and other costs, retail operating costs, customer acquisition and retention costs, a retail margin, and relevant taxes and fees.

The initial VDO is likely to rely heavily on existing regulatory practice and benchmarks given it needs to be available from 1 July 2019. The future approach to the VDO may change as the commission monitors the impact of VDO decisions, undertakes research, and monitors regulatory developments elsewhere. Any changes to methodology would be considered in consultation with stakeholders, and having regard to an appropriate implementation period.

We note the AER is consulting on an approach for the Default Market Offer (DMO) for electricity in non-price regulated jurisdictions. The AER is proposing to develop a DMO using a 'top down approach', where approved prices are informed by existing prices in the market, and any forecast changes in costs.<sup>10</sup> The commission could consider similar approaches in the future.

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<sup>9</sup> See, for example: Consumer Action Law Centre, submission to the Essential Services Commission reference price methodology consultation paper, April 2018, pp. 1-2, and Powershop, submission to the Essential Services Commission reference price methodology consultation paper, April 2018, p. 2, and Momentum Energy, submission to the Essential Services Commission reference price methodology consultation paper, April 2018, p. 2.

<sup>10</sup> AER 2018. *Default Market Offer Price – AER position paper*, November.

## 2.3. What is an efficient retailer?

The terms of reference note that the VDO price should be based on the efficient costs to run a retail business. The definition of the efficient retailer informs the approach to estimating different cost components. It is important to note that the VDO will be based on a notional or hypothetical efficient retailer rather than any individual business's costs.

One possible definition of the notional efficient retailer is one that:

- has achieved economies of scale (i.e. one that has an efficient cost base)
- is a standalone retailer and is not vertically integrated (i.e. does not have economies of scope)
- serves domestic and small business customers in Victoria, and potentially across the National Electricity Market
- currently can offer both standing offer and market offer contracts
- has an existing customer base that it defends
- does not adopt a loss leading pricing strategy to acquire new customers.

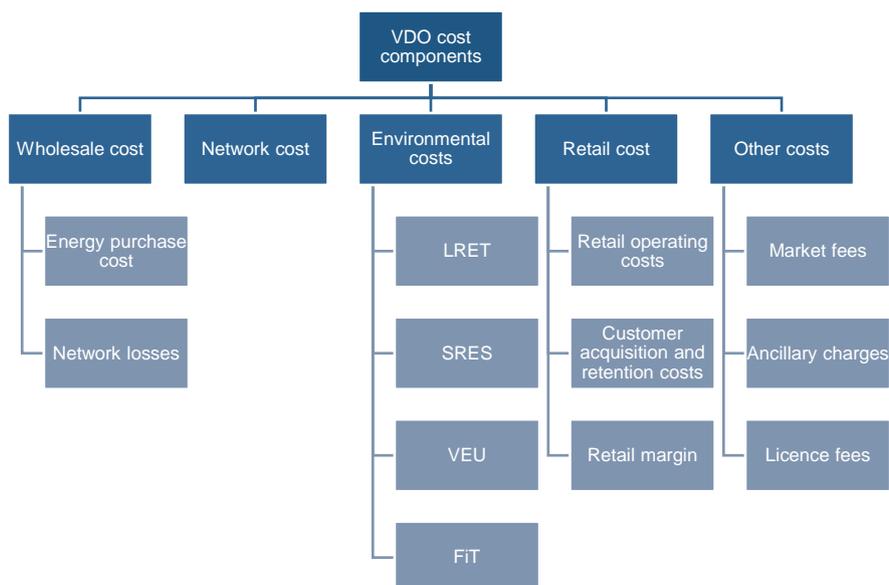
This description has been informed by how IPART (NSW) described the representative retailer in approving electricity prices to 2016. We have also considered the Queensland Competition Authority's standard retailer as one that does not adopt a loss leading price strategy.

1. Is the definition of a notional retailer suitable for the Victorian retail energy market? What alternatives could we consider for the VDO?

### 3. Estimating the different cost components

In this chapter, we outline the approaches to calculate different components of the VDO using a cost-based approach. The cost elements we would consider including in a VDO are shown in Figure 1.

Figure 1 VDO cost components for retailing electricity



#### 3.1. Wholesale electricity costs

Retailers purchase electricity wholesale from the National Electricity Market to meet the demand of their customers. In the National Electricity Market, the supply and demand for electricity is balanced in real time. Generators offer prices for the supply of electricity, and based on how much electricity is consumed, a spot price is determined every half hour.<sup>11</sup> Spot prices in the National Electricity Market can be volatile, depending on the supply and demand conditions of these half hour time intervals.

<sup>11</sup> In November 2017, the Australian Energy Market Commission determined the national electricity market would move to a five minute settlement period from 1 July 2021.

Retailers sell electricity to customers at a price that is usually left unchanged for a period of time. The volatility in the spot price therefore represents a risk the retailers must manage.

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.

The commission's March 2018 consultation paper on a reference price outlined a variety of methods that can be used to forecast the wholesale electricity costs faced by retailers, including long-run marginal cost and market modelling. The consultation paper established the futures market method as the preferred approach as it provided more transparency than the alternatives; specifically, that it uses publicly available data. It also replicates the approach an efficient retailer would take to minimising wholesale costs and managing financial risks through hedging (via products traded on the Australian Stock Exchange (ASX) futures market). Most submissions on the commission's March 2018 consultation paper supported the proposed futures market approach.

We also note that other regulators have used the futures market approach to estimate wholesale electricity costs including IPART (NSW),<sup>12</sup> and ICRC (ACT).<sup>13</sup>

For these reasons, commission staff propose to use the futures market method to estimate the VDO. We are interested in feedback on how to implement the futures market method for the VDO.

There are three main products traded on the ASX futures market for hedging purposes:

- base load swap – a contract to trade a fixed amount of electricity for a certain price at all times in a day
- peak swap – similar to a base load swap, but applying to trade only during the peak time period
- caps – a contract that gives the holder the option to buy a given amount of electricity at an agreed price.

To forecast the wholesale costs incurred by a retailer using the futures market method requires assumptions about how a retailer would purchase each of these three products to cover their forecast load. Several submissions to the commission's March 2018 consultation paper noted that there are a range of 'efficient' hedging approaches that a prudent retailer may take when purchasing futures contracts.

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<sup>12</sup> IPART 2013. *Review of regulated retail prices and charges for electricity from 1 July 2013 to 30 June 2016*, Final Report, June.

<sup>13</sup> ICRC 2018. *Issues Paper: Electricity model and methodology review 2018-19*.

The key assumptions required when undertaking the futures market approach include the period and profile over which forward contracts are purchased, and the forecast demand or load profile retailers would need to cover.

### **Time period to purchase forward contracts**

The futures market approach requires us to assume the time period in which a retailer would purchase forward contracts, and the appropriate risk strategy underpinning this. Some submissions responding to the commission's March 2018 consultation paper on the reference price raised concerns over the choice of this time period, including Powershop:

...different retailers opt for different hedging strategies based on their overall risk appetite, corporate/funding structure, access to physical generation, business lifecycle and strategy. There is not a 'right' and 'wrong' approach. Accordingly, some retailers progressively hedge (various timings and volumes) over an 11-12 month period while others may choose to hedge entire forecast load concurrently with the time of setting customer prices.<sup>14</sup>

The most common period noted by submissions for developing a hedge book appears to be 12 months ahead, which differs from a 'point-in-time' (i.e. 40 days) or up to 24 months.

### **Contract purchasing profile**

Once settled on the purchasing period, there is a need to consider the profile over which contracts are purchased over. One approach is a time-weighted (i.e. unweighted) method. This is where a contract purchased 20 days ago has the same weighting as one purchased 1 day ago regardless of the volume of trade on those days or the likelihood of trade.

Alternatively, a trade weighted approach could be considered. This is where contract prices are more heavily weighted on days where the volume traded is higher. This reflects the market demand, but this can also include re-trades that occur and trades undertaken by those who are 'playing the market'.

The methodology could also adopt a buying curve. This would determine the rate at which the retailer would purchase. The shape of the curve could be exponential, indicating that closer to the time where contracts take effect more contracts are purchased. Another possibility would be to have a logarithmic curve. This would indicate the further away from the contract date more contracts are purchased.

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<sup>14</sup> Powershop, submission to the Essential Services Commission reference price methodology consultation paper, April 2018, p. 4.

## Forecast load profile

As part of forecasting wholesale electricity costs, we need to forecast load profiles to determine how much of each contracting product a retailer needs to purchase. Commission staff propose to use the most recent year of manually read interval meter (MRIM) data to estimate the VDO, as it reflects the most recent publicly available data on actual load profiles across each distribution zone.

In responding to the commission's March 2018 consultation paper on the reference price, stakeholders provided mixed feedback on the approach taken to forecast load profiles with some supportive, others seeking more recent data rather than historical manually read interval meter data, and others suggesting a longer data period is required. Smaller retailers raised reasons why their load profile may differ from the average, whereas a large retailer confirmed that manually read interval meter data is currently credible for determining shape, load and maximum demand.<sup>15</sup>

We would undertake the analysis as close to the implementation date as is possible. More complex issues associated with the timing of readings can be explored at our workshops.

2. Please provide your views on the time period, buying curve and load profile that are most suitable to the Victorian electricity market.

## 3.2. Network losses

When electricity is transported through the transmission and distribution networks, some of it is lost in the process. Electrical losses occur in both the transmission and distribution networks because of electrical resistance in the wires which converts some electricity to heat. These losses must be factored into any electricity purchased through the wholesale market to ensure that supply meets demand. As a result, more electricity is generated than is consumed by end users.

Consistent with the approach set out by the commission in its March 2018 consultation paper on a reference price, staff consider it is appropriate to use AEMO published data to calculate network

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<sup>15</sup> AGL, submission to the Essential Services Commission reference price methodology consultation paper, April 2018, p. 4.

losses as they are the only publicly available and comprehensive estimates available. This is calculated as per Equation 1, where:

- Distribution Loss Factor (DLF) is the loss for low voltage lines that would transport electricity to small customers.<sup>16</sup>
- Transmission Loss Factor (TLF) is the average of the marginal transmission loss factors.<sup>17, 18</sup>

Equation 1 Total loss factor calculation

$$Total\ Loss\ Factor = 1 - \left( \frac{1}{DLF \times TLF} \right)$$

This approach requires the commission to either use all transmission loss factors published by AEMO or pick certain nodes. If the commission were to select only a few nodes for each distribution zone to represent transmission losses, it would be those with a large concentration of residential and small businesses. For example the commission would not select nodes that service large industrial estates or generators. Staff believe this is an appropriate approach because it reflects the losses that are incurred in supplying electricity to residential and small business customers, rather than the losses associated with industrial electricity consumption.

The AEMC use loss factors published by AEMO, and distribution zone loss factors have been based on allocating transmission connection points to different zones.

### 3. How should the commission calculate transmission losses?

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<sup>16</sup> Type E from Australian Energy Market Operator, *Distribution Loss Factors for the 2017/18 Financial Year*, July 2017, pp. 9-11.

<sup>17</sup> Australian Energy Market Operator, *Regions and Marginal Loss Factors: FY 2017-18, National Electricity Market*, November 2017.

<sup>18</sup> Australian Energy Market Operator, *Treatment of Loss Factors in the National Electricity Market*, July 2012, p. 7.

### 3.3. Network costs

Retailers pay network providers to transport the energy they sell to their customers via poles and wires for electricity. In Victoria, there are five electricity distribution networks, as well as a transmission network. The charges that are levied by network providers are approved by the Australian Energy Regulator (AER) on an annual basis.

The five electricity distribution businesses in Victoria were required to install Advanced Metering Infrastructure (AMI, i.e. smart meters) to small customers in their networks. To recover the cost of the AMI rollout, the AER approves a regulated charge for AMI on a per customer basis.

Consistent with the commission's approach in its March 2018 consultation paper on a reference price, staff consider it is appropriate to treat network costs as a pass-through. That is, an efficient retailer is assumed to pass on the network costs directly from the distribution or transmission business to the end user, which in this case would be the residential or small business customer. This applies for both the AMI and the network tariffs as part of the AER revenue determinations. Other regulators including IPART (NSW) and ICRC (ACT) use a pass-through approach.

We have identified the network tariffs that the VDO could be based on using the approved network business tariff proposals. These are shown in Table 1. Different network tariffs for residential and small business customers are likely to require the VDO to be set separately for each of these customer types.

This implies that there would be two VDOs set for each distribution zone, or ten in total.

Table 1 Distribution tariffs

Distributor	Residential tariff	Small Business tariff
AusNet	Small residential single rate, NEE11	Small business single rate, NEE12
CitiPower	Residential single rate, C1R	Non-residential single rate, C1G
Jemena	Single rate, A100/F100a/T100b general purpose	Small business A200/F200a/T200b
Powercor	Residential interval, D1	Non-residential interval, ND1
United Energy	Low voltage small 1 rate, LVS1R	Low voltage medium 1 rate, LVM1R

We also note that AER determinations apply from 1 January each year. We are interested in stakeholder views as to whether the first VDO might be set for a period of six months. This would align the VDO with AER determinations. We are also interested in feedback on whether an alternative approach should be considered, to accommodate changes in network costs.

4. Are the tariffs set out in Tables 1 and 2 the appropriate tariffs to use for establishing the VDO?
5. How should we treat the calendar year network revenue determinations in the context of the introduction of the VDO from 1 July 2019?

### 3.4. Environmental costs

Retailers in Victoria currently face four main environmental costs:

- Large-scale Renewable Energy Target (LRET): a Commonwealth government scheme that encourages renewable energy generation by creating a market for renewable energy certificates
- Small-scale Renewable Energy Scheme (SRES): a Commonwealth government scheme that supports the installation of small-scale renewables, such as household solar rooftop panels and solar hot water systems.
- Victorian Energy Upgrades (VEU): a state based program that places a liability on Victorian energy retailers (both electricity and gas) to surrender a specified number of Victorian Energy Efficiency Certificates each year.
- Feed in tariff (FiT): retailers credit small scale renewable energy with the minimum feed-in tariff that includes an additional allowance for the avoided social cost of carbon that should be accounted for in retailer costs.

Environmental costs, like wholesale costs, can be estimated using a market based approach of a modelling method, such as long run marginal cost. The commission proposed to use market data to inform environmental costs in its March 2018 consultation paper on a reference price. During the reference price consultation, there was broad support from stakeholders to use a market-based approach for estimating environmental costs. For example:

“AGL generally supports the ESC using...market based approaches for environmental scheme costs.”<sup>19</sup>

Some submissions did note that there was some uncertainty around future certificate prices for renewable energy and Victorian Energy Efficiency Certificates, but that forward market trading is the most transparent method at this point in time.<sup>20</sup>

The ICRC in the ACT includes the cost of complying with both state and federal based environmental schemes in their regulated electricity prices.<sup>21</sup> The ICRC uses a market-based approach for determining the Commonwealth renewable scheme liabilities using an average of spot price data over the preceding 11 months prior to a decision. A holding cost of 10 per cent per year is added to the spot price to compensate retailers for the cost of holding certificates up until their surrender.<sup>22</sup>

Commission staff propose a market-based approach is used for forecasting environmental costs, as proposed in the commission’s March 2018 consultation paper. This approach represents the efficient costs of meeting these obligations. This is consistent with our approach for wholesale electricity cost. We outline the different components in Table 3.

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<sup>19</sup> AGL, submission to the Essential Services Commission reference price methodology consultation paper, April 2018, p. 1.

<sup>20</sup> EnergyAustralia, submission to the Essential Services Commission reference price methodology consultation paper, April 2018, p. 16.

<sup>21</sup> ACT Parliamentary Council ‘Independent Competition and Regulatory Commission (Price Direction for the Supply of Electricity to small customers on standard retail contracts) Terms of Reference Determination 2016’

<sup>22</sup> ICRC 2017. *Standing offer prices for the supply of electricity to small customers from 1 July 2017 – Final Report*, June.

Table 2 A method for environmental costs

Cost component	Method
LRET	Loss adjusted electricity multiplied by futures market prices and by Clean Energy Regulator’s Renewable Power Percentage (RPP), with an upper bound of the penalty rate.
SRES	Loss adjusted electricity multiplied by the clearing house price of \$40 and the Clean Energy Regulator’s Small-scale Technology Percentage (STP).
VEU	Total liable electricity multiplied by the reduction rate and the forecast price using publicly available data, with an upper bound of the penalty rate.
FiT	The avoided social cost of carbon allowance multiplied by the proportion of small scale renewable electricity exported to total electricity demand.

### 3.5. Retail operating costs and customer acquisition and retention costs

Retail operating costs consist of all the costs incurred by the retailer in conducting its business. These costs can be separated into two main sub-categories:

- Cost to serve – a range of costs that include billing and revenue collection systems, IT systems costs, call centre costs, corporate overheads, energy trading costs, provision for bad and doubtful debts, and any regulatory compliance costs.
- Customer acquisition and retention costs – the costs associated with acquiring new customers and retaining existing customers, that include general marketing, business development, promotions and sponsorships, costs of transferring customers to and from other retailers. This is also known as competition costs or the cost to compete.

In response to the commission’s March 2018 consultation paper, most stakeholders believed that using a benchmarking approach was reasonable as an interim approach. Simply Energy’s submission raises views that were highlighted by a number of other submissions.

“Simply Energy understands that in the current time constraints, a benchmarking approach is the only feasible way of calculating retail operating costs and margins. Having said that, benchmarking is a high-level approach giving indicative results only. There can be jurisdictional as well as organisational efficiency factors that can influence the actual operating costs incurred by a business.

In view of this, Simply Energy only supports benchmarking as an interim approach. A more effective approach would be to undertake a bottom-up analysis of major retailers operating in Victoria and then use benchmarking as a reference to ensure the inferred operating costs and margins are reasonable.”<sup>23</sup>

For the commission’s reference price methodology, the commission did not consult on including competition costs, or customer acquisition and retention costs, in the price. However, many retailers identified customer acquisition and retention costs as a valid cost incurred by a retailer and should be included in any price.<sup>24</sup> The terms of reference issued to the commission note that the VDO price should include a ‘modest allowance’ for customer acquisition and retention costs.

We understand that views have been raised that customer acquisition and retention costs are embedded into existing cost structures. We are interested in feedback from electricity retailers on the extent to which customer acquisition and retention costs can be readily estimated, separately from other costs.

### **Approaches to estimating retail operating costs and customer acquisition and retention costs**

The two approaches to estimate retail operating costs are:

- bottom-up where we request operating cost data from retailers operating in Victoria. It should provide the most accurate estimate of retail operating costs as it is based on actual data, but it is relatively time intensive.

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<sup>23</sup> Simply Energy, submission to the Essential Services Commission reference price methodology consultation paper, April 2018, p. 3.

<sup>24</sup> Momentum Energy, submission to the Essential Services Commission reference price methodology consultation paper, April 2018, p. 3.

- benchmarking approach utilises publicly available data on operating costs that can usually be sourced from annual reports.

Most Australian regulators have adopted a combination of these two approaches in their recent reviews into retail prices.

In its 2013 final report into the review of regulated retail prices for electricity, IPART separated the cost components of retail operating cost into a cost to serve and a customer acquisition and retention costs component. In previous decisions a single cost allowance was determined.<sup>25</sup> The approach across their determinations can be summarised as:<sup>26</sup>

- characterise a standard retailer on which the costs would be based
- undertake a bottom up analysis using information provided by NSW standard retailers using historical, current and forecast costs to develop a range
- use publicly available data, including other regulators' decisions on operating costs, to assess the reasonableness of the bottom up estimates
- decide on a point in the range by considering IPART's objectives and terms of reference
- determine if the range should be adjusted within the regulatory period.

ICRC has not set out its own approach, but instead has used IPART's figure as a benchmark for regulated ActewAGL prices in the 2017-20 decision.<sup>27</sup> The figure is updated for inflation. ICRC is consulting on its approach going forward and whether a hybrid of bottom-up and benchmarked costs is more appropriate. They note the work the ACCC recently completed in its retail electricity pricing inquiry and how it may inform the implementation of the ICRC's methodology.<sup>28</sup>

The ACCC undertook a bottom up analysis using data collected from 18 retailers on the costs to serve and customer acquisition and retention costs. The ACCC found that the costs to serve were \$92 per customer (\$real2016-17) for Victoria, whereas customer acquisition and retention costs were \$59 per customer (\$real2016-17).<sup>29</sup> The ACCC noted there may be additional regulatory costs for operating in Victoria, which are estimated at \$11 per customer.<sup>30</sup>

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<sup>25</sup> IPART 2013. *Review of regulated retail prices for electricity from 1 July 2013 to 30 June 2016*, Final Report, June.

<sup>26</sup> IPART 2013. *Review of regulated retail prices for electricity from 1 July 2013 to 30 June 2016*, Final Report, June.

<sup>27</sup> ICRC 2016. *Standing offer prices for the supply of electricity to small customers from 1 July 2017*, Final Report, October.

<sup>28</sup> ICRC 2018. *Issues Paper: Electricity Model and Methodology review*, October.

<sup>29</sup> ACCC 2018. *Retail Electricity Pricing Inquiry – Final Report*, July.

<sup>30</sup> ACCC 2018. *Retail Electricity Pricing Inquiry – Final Report*, July.

## An approach to estimating retail operating costs

For timeliness and transparency, commission staff propose to use a benchmarking approach as an interim measure for retail operating costs including customer acquisition and retention costs for the first VDO to apply from 1 July 2019.

The benchmarking approach is transparent, relatively simple to implement and can be completed in a timely manner. The recent inquiry by the ACCC provides some useful insights into average costs to serve and customer acquisition and retention costs across the 'Big 3' retailers, Victoria and NEM wide. We would like to verify this with information from retailers operating in Victoria, including more recent data and our own analysis in the future. We invite retailers to provide us with their cost information to support our analysis.

Consistent with the terms of reference, the product and service offer under the VDO is the equivalent to an existing standard retail contract.

6. Do you agree with our proposed approach of using benchmarking? If not, why not, and what alternative approach should we consider?
7. What should be included as efficient retail operating costs and a modest customer acquisition and retention costs allowance?
8. For electricity retailers – how readily can you separate customer acquisition and retention costs from other operating costs? What issues might we need to consider?

### 3.6. Retail operating margin

The terms of reference require the commission to include an allowance for a maximum retail profit margin. The retail operating margin represents the return that a retailer requires to support sufficient capital in order to finance the ongoing operation of its business. The retail operating margin needs to compensate the investor for the capital invested in the business and the non-diversifiable risks associated with the investment. It is important that risks accounted for in other costs are not double counted in the retail operating margin. For example, if the risk associated with forecast future energy costs are reflected in the wholesale energy cost component then they should not be included in the retail operating margin.

## Approaches to estimating retail operating margin

Three methods are typically used in Australia to estimate the retail operating margin:

- Bottom-up approach develops an estimate of the representative retailer's asset base (including intangibles and working capital) and multiplied by an estimate of the weighted cost of capital (WACC).
- Benchmark approach uses publicly available data on reported margins from comparable listed firms (not necessarily other energy retailers) and the analysis of previous regulatory decisions.
- Expected returns approach sets the retail margin at a level so that there is a match between the systematic risk to net cash flows of an energy retailer and the systematic risk that is assumed when estimating the cost of capital for the same energy retailer.

For its 2010 and 2013 decisions on retail electricity prices, IPART completed an in-depth analysis into retail operating margins. This included looking at all three approaches and taking an average between them.<sup>31</sup> The ICRC used IPART's benchmark analysis as the basis for their 2017-20 price decision. For the 2013 decision, IPART's reasonable range for retail margin was between 5.3 per cent and 6.1 per cent.<sup>32</sup> Recent analysis by the ACCC, found retail margins between 2.7 per cent and 11.2 per cent – with the highest being Victoria.<sup>33</sup>

## An approach for estimating the retail operating margin

Given timeframes, commission staff propose to use existing data sources for the first VDO from 1 July 2019. We would consider regulatory decisions by other economic regulators, and (if possible) data provided by retailers. We will undertake our own research to inform the retail margin for future VDOs.

Commission staff are interested in exploring a transition period, where an initial retail operating margin is set that reduces at each subsequent price re-set. Such an approach would provide time for the commission to monitor the impacts of its initial VDO decisions and adjust its approach if need be.

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<sup>31</sup> IPART 2013. *Review of regulated retail prices for electricity from 1 July 2013 to 30 June 2016*, Final Report, June.

<sup>32</sup> SFG Consulting 2013. *Estimation of the regulated profit margin for electricity retailers in New South Wales*, June.

<sup>33</sup> ESC analysis of ACCC 2018. *Retail price inquiry – Final report*, July.

### 3.7. Other costs

Other costs represent a range of costs that we have not explicitly discussed above. These, along with our proposed method are described in Table 4.

Table 3 Proposed methods for other costs

Cost component	Description	Proposed Method
AEMO market fees	To participate in the energy market, retailers must be registered with AEMO as participants and there are costs associated with this.	Data from the Energy Market Budget and Fees report. <sup>34</sup>
Ancillary charges	AEMO procures ancillary services, such as frequency response, that are not covered in the wholesale market prices.	Use historical publicly available information to estimate ancillary charges.
ESC licence fees	This is a licence fee to operate in the retail electricity market in Victoria.	Use a customer weighted average of all retailer licence fees when estimating the cost of a licence fee.

9. Are there any other costs incurred by an electricity retailer that we should consider? Why?

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<sup>34</sup> For example AEMO Electricity revenue and fee schedule, accessed 30 March 2018, [Electricity Revenue Requirement and Fee Schedule 2017-18](#).

## 4. Other considerations

In this chapter we look at how the commission might approach cost allocation and tariffs, and other matters we may need to consider.

### 4.1. Cost allocation and tariffs

In setting the VDO, the commission will need to determine an appropriate tariff structure and how to allocate costs between the different tariffs.

#### A tariff structure and cost allocation

Currently, retailers can choose the tariff structure of standing offers. As such, there are many different tariff structures including flat, time of use, flexible pricing and demand. Time blocks can also vary across retailers. We believe that given the VDO objectives it is reasonable to use a simple tariff structure – a supply charge presented as dollars per day and a usage charge presented as cents per kilowatt hour.

The commission could allocate costs that do vary with consumption to the variable component of the VDO and all fixed costs to the supply charge component of the VDO. Cost estimates are split into the fixed and variable components as per the equations below.

$$\text{Fixed} = (\text{Retail Operating Costs} + \text{Fixed Network Costs} + \text{Per customer market fees}) \times (1 + \text{retail margin})$$

$$\text{Variable} = (\text{Wholesale costs} + \text{Network Losses} + \text{Environmental fees} + \text{Variable Network costs}) \times (1 + \text{retail margin})$$

We propose to maintain the distributors' most simple tariff structure to inform the VDO tariff structure. For CitiPower, Jemena, and Powercor this is a single rate usage tariff. The other distribution businesses have different tariff structures. For United Energy a seasonal tariff applies while in the AusNet Services area a two block structure applies.

Currently, standing offers include time of use and flexible pricing, therefore the variable component of the VDO could be set as the consumption weighted average maximum price for all other tariff structures. Compliance could be confirmed using MRIM data to create a half-hourly consumption profile for small customers for retailers to calculate a weighted average price.<sup>35</sup>

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<sup>35</sup> AEMO publishes MRIM data for each distribution zone for Type 5 meters, the meter installed for small customers, in 48 hour hourly time steps.

10. Does this proposed structure provide a simple and practical approach to deal with the variety of standing offers?
11. What other approaches to cost allocation would you consider appropriate?

## 4.2. Other matters

Other matters the commission may need to consider in the development of the VDO include:

- Any consequential amendments to the commission's retail energy codes.
- The need for the VDO framework to account for unexpected events that impact on costs, involving consideration of pass-throughs and the timing of VDO resets.
- Implications for the prices charged to customers in embedded networks once standing offers are abolished and replaced with the VDO.