

Victorian Default Offer 2020 – draft decision

Public forum

8 October 2019



Purpose of today's forum

- Provide a summary of our draft decision for the Victorian Default Offer to apply from 1 January 2020
- Opportunity for participants to provide feedback, and take views into account as we prepare our final decision

Agenda

- 12.20pm Welcome and introduction
Kate Symons – Chairperson, Essential Services Commission
- 12:25pm Overview of draft decision
Jordan Tasker – Project Manager, Essential Services Commission
- 12.45pm Jake Lilley – Senior Policy Officer, Consumer Action Law Centre
- 12.55pm Lawrence Irlam – Industry Regulation Lead, EnergyAustralia
- 1.10pm General questions and discussion
- 1.30pm Overview of wholesale electricity cost estimation and discussion
Andrew Harpham – Frontier Economics
- 1.50pm Close

Participant feedback

- Today we're using Slido – a live Q&A app to facilitate questions and discussion
- Go to slido.com and enter the event code VDO2020
- Type your question and we'll aim to respond during the question and discussion session
- You can also submit a written question or raise a question from the floor

Welcome and introduction

Kate Symons, Chairperson
Essential Services Commission

Overview of draft decision

Jordan Tasker – Project Manager
Essential Services Commission

What is the Victorian Default Offer (VDO)?

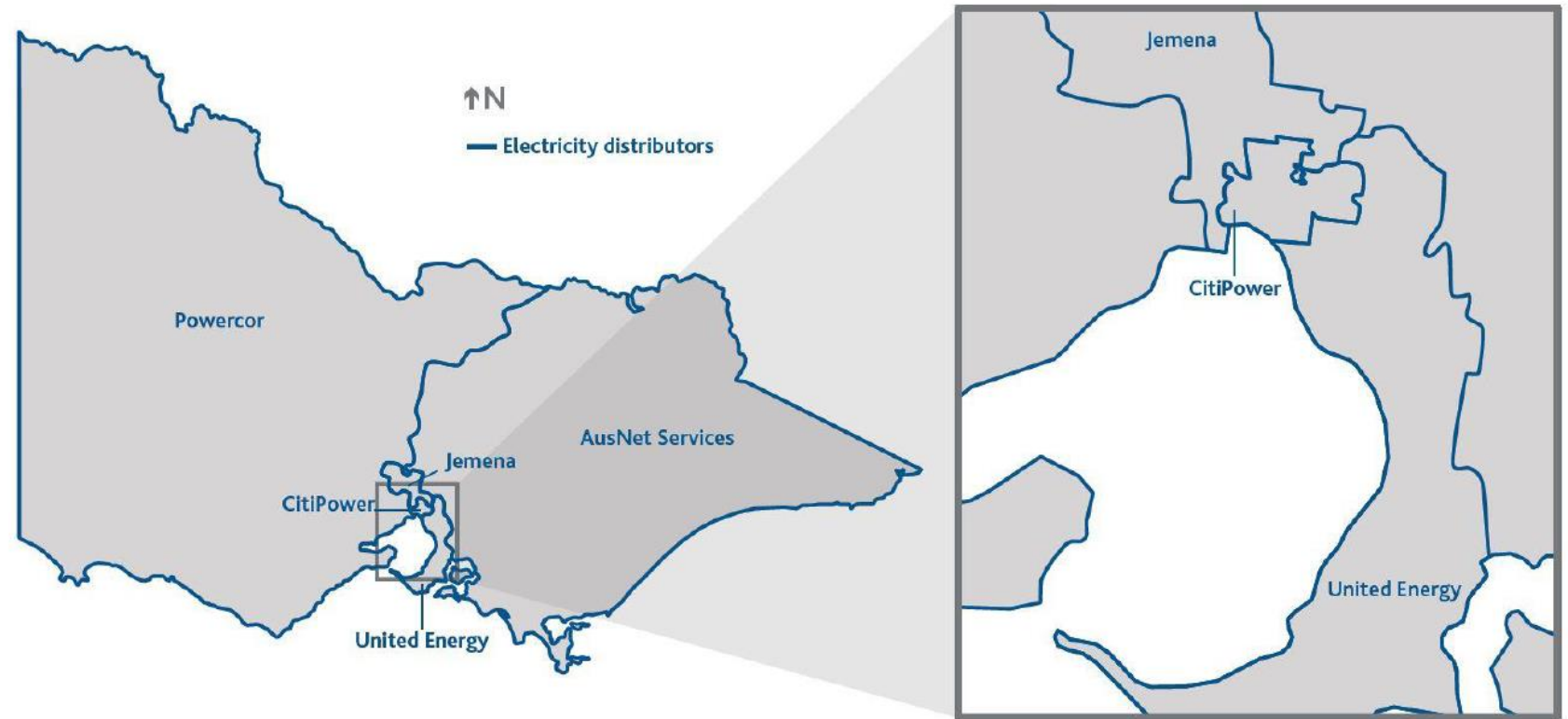
- The VDO is a framework for regulating prices for standing offers
- Government objective: that the VDO provides a simple, trusted and reasonably priced electricity option that safeguards consumers unable or unwilling to engage in the electricity retail market
- Customers on a standing offer with a flat tariff structure (a daily supply charge and a flat anytime usage charge) started receiving the VDO tariffs on 1 July 2019
- Generally available to all Victorian domestic and small business customers*
- VDO does not preclude electricity retailers from offering customers different prices and terms through market offers

* Those consuming no more than 40MWh per annum

What does the VDO currently look like?

From 1 July to 31 December 2019

- Two VDOs in each of the five distribution zones in Victoria
 - One domestic
 - One small business
- A controlled load tariff applies to domestic customers where applicable



Victorian Electricity Distribution zones

Commission's role

- For the first VDO (1 July 2019 to 31 December 2019) we provided advice on VDO flat tariffs to government – our advice was accepted
- As set out in an Order in Council, from 1 January 2020, we will determine the VDO under the *Essential Services Commission Act 2001* (Vic.)
- **Key change from 1 January 2020:** all standing offers – not only those with flat tariffs – will fall under the VDO framework regulated by the commission

Commission's role

From 1 January 2020, we will determine:

- tariffs that are to apply to flat standing offer tariffs (including controlled load tariffs for domestic customers where relevant)
- the maximum annual electricity bill amount under a standing offer that provides for tariffs that are not flat tariffs – the *VDO compliant maximum annual bill*

Process so far

- 30 May 2019 – pricing order finalised by government
- 23 July 2019 – VDO 2020 issues paper released for consultation
- 12 August 2019 – consultation on issues paper closed
- 27 August 2019 – workshop session at energy open forum
- 3 September 2019 – released information request to all retailers for cost data
- 20 September 2019 – VDO 2020 draft decision released for consultation
- 1 October 2019 – cost information request due

Issues paper content and feedback

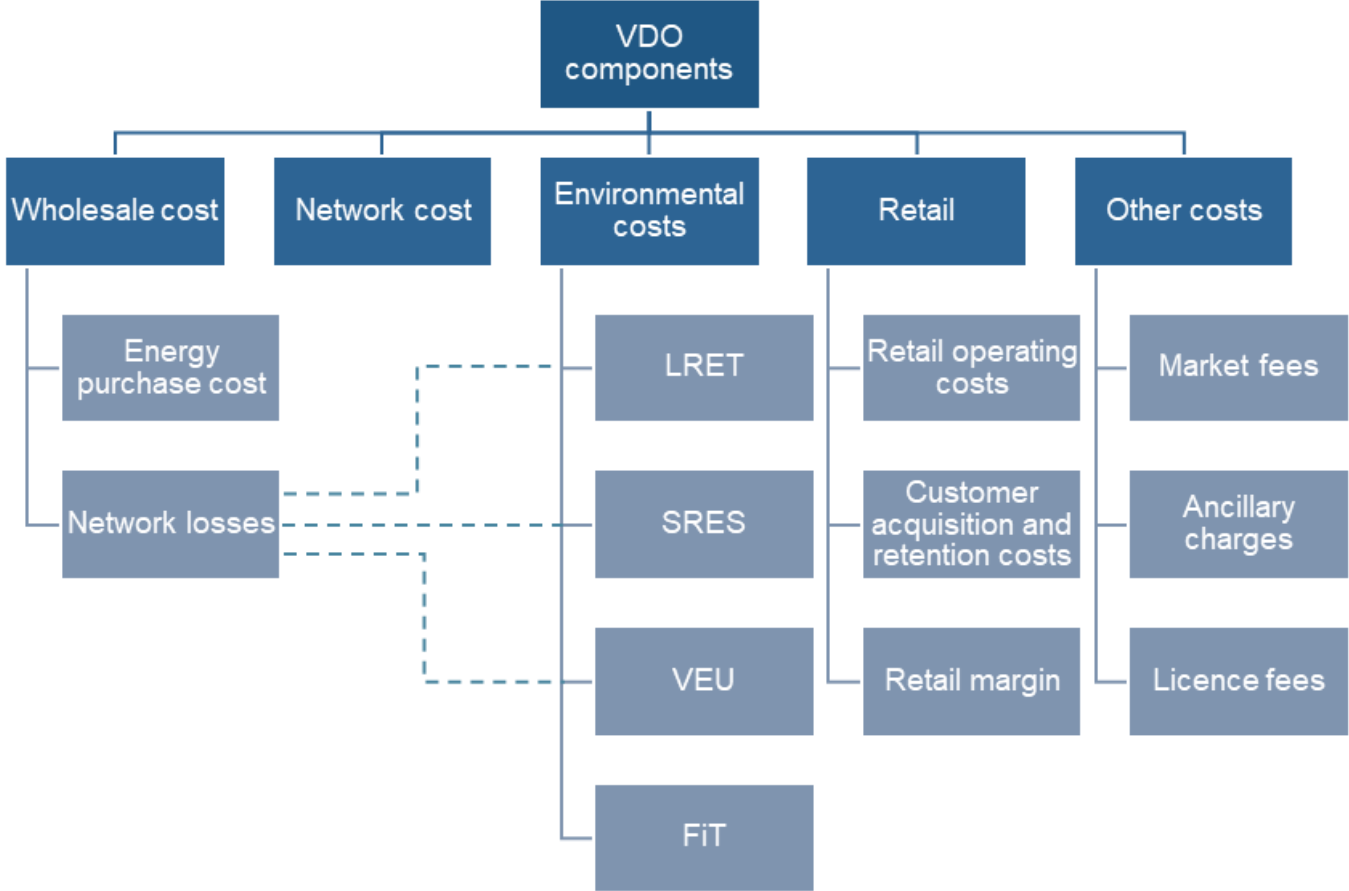
Our issues paper set out our initial views on methodology and sought feedback. Key points included:

- Proposal to continue using cost-based approach
- Update costs for new information or changes in market data
- Options for a setting a *VDO compliant maximum annual bill*

We received 17 submissions covering a range of issues focusing on:

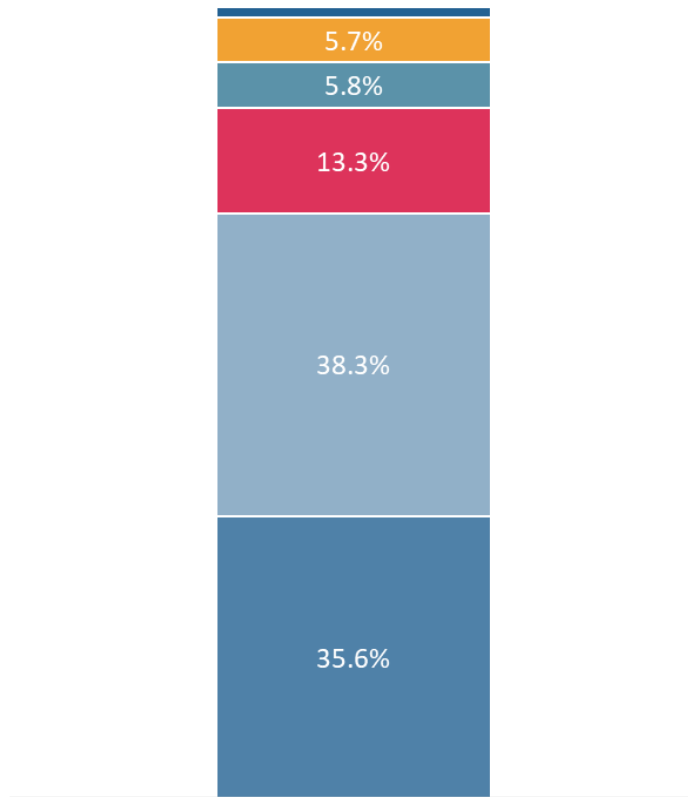
- The *VDO compliant maximum annual bill*
- The estimation of particular costs (e.g. wholesale and environmental)
- Collection of retailer cost data

VDO cost components

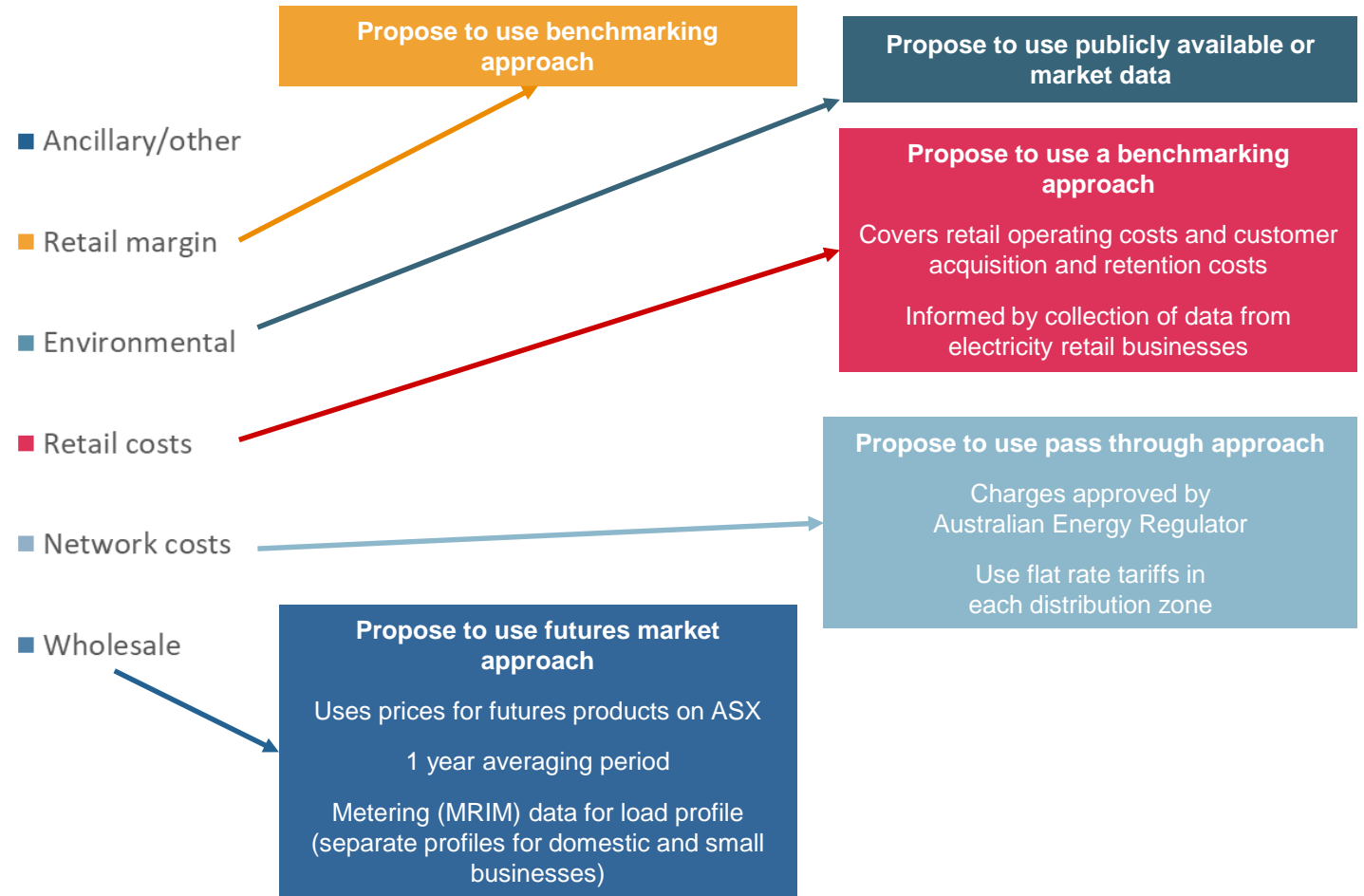


Draft decision proposals and contribution to total costs

Cost stack components, average all zones residential customers, 4 000 kWh per year



VDO 2020 - draft decision



*Note – excludes GST

Estimating the VDO for flat standing offer tariffs

- Convert the cost stack into a set of tariffs for each distribution zone

Supply (\$ per day)	Usage (cents per kilowatt hour)
Retail costs (incl. CARC)	Wholesale costs
Fixed network tariff	Flat variable network tariff
Environmental/other (per customer costs)	Environmental/other costs (per kWh costs)
Retail margin	Retail margin

Comparison to current VDO

Component	Contribution to change domestic		Contribution to change small business		Description
	\$	%	\$	%	
Wholesale	\$18	1.3%	\$96	1.7%	Higher futures market prices for 2020.
Network	\$19	1.4%	\$106	1.8%	Higher charges forecast for 2020.
Environmental	-\$23	-1.6%	-\$114	-2.0%	Falling LRET certificate prices in 2020.
Other ancillary fees, retail operating costs, CARC, retail margin, GST	\$5	0.3%	\$16	0.3%	Driven largely by increased volume of solar exports in 2018-19 and changes to ancillary fees.
Average total VDO bill change	\$19	1.3%	\$105	1.7%	

Note: these estimates are based on an annual bill based on the flat tariff VDO, averaged across the five distribution zones for a typical domestic customer (consuming 4,000 kWh) and small business customer (consuming 20,000 kWh). Numbers may not sum due to rounding.

Our draft decision also applies to other standing offer tariffs

- From 1 January 2020 non-flat standing offer tariffs (i.e. time of use, demand and flexible) must comply with the *VDO compliant maximum annual bill*
- Draft decision for retailers' non-flat tariffs to comply at a specified consumption level – 4,000kWh for domestic, 20,000kWh for small business
- Proposal seeks to safeguard customers while also providing a level of consistency with discounting framework, limiting compliance costs, and considering any future changes to tariff structures

Other matters

Retailers must publish their standing offer tariffs in the Government Gazette

- The order provides a window for retailers to gazette their standing offer tariffs
- The draft decision notes the commission would review compliance of non-flat standing offer tariffs with the maximum annual bill based on:
 - usage profiles that apply for the calculation of discounts
 - profiles submitted to the commission by retailers for tariff types not covered in the order in council

Variations to the VDO price determination

- The draft decision outlines the situations in which a variation may be made, noting that they are reserved for material unforeseen events across the industry and for errors




Summary of draft decision

- Method used to calculate VDO largely similar to our advice to government
- VDO would increase 1.3% (\$19 p.a.) for domestic customers, 1.7% (\$105 p.a.) for small business customers. Main factors include:
 - higher wholesale costs due to market movements and network costs
 - partly offset by falling market price of large scale renewable certificates
- The *VDO compliant maximum annual bill* is set at a representative point of consumption and usage profile

Next steps

- **17 October 2019** – submissions to draft decision due through Engage Victoria
- **By 25 November 2019** – ESC issues final decision and determination
- **25 November - 18 December 2019** – Retailers to gazette standing offer tariffs for the period beginning 1 January 2020

Contact us

	www.esc.vic.gov.au
	/company/essential-services-commission
	@EssentialVic



consumer
action
law centre

OUR VISION:

a just marketplace,
where people have power
and business plays fair

OUR PURPOSE:

To make life easier for people experiencing vulnerability and disadvantage in Australia



Victorian Default Offer

What is the policy objective?

“The objective of the Victorian default offer is to provide a simple, trusted and reasonably priced electricity option that safeguards consumers unable or unwilling to engage in the electricity retail market.”



Draft decision issues

New decision making: capping what people pay on the 'non-flat' VDO at a reference point means different outcomes for the 'disengaged.'

- Varying peak/ off peak consumption or consumption creates a difference in price outcome.

"The objective of the Victorian default offer is to provide a simple, trusted and reasonably priced electricity option that safeguards consumers unable or unwilling to engage in the electricity retail market."



Draft decision issues

- Retail operation costs \$134 – this is arrived at through a circular benchmarking approach and includes ‘transition costs’ when transition has already occurred.
- Customer acquisition and retention costs – allowances for marketing channels soon to be prohibited?
- Retail margin – circular approach?
- “True up” of ascertainable costs

Broader policy issues

- How do we ensure people get access?
- Not many people are on standing offers – many more likely to be on expired benefits
- Shouldn't all retailers adjust prices for all customers so no-one is paying higher than VDO unless they've chosen to do so?
- Embedded networks
- Protections for Gas are needed too.



One retailer's perspective on the draft VDO

Lawrence Irlam
Industry Regulation Lead
8 October 2019



EnergyAustralia
LIGHT THE WAY

What we're most worried about

- LRET liability
- Wholesale costs
- Metering, Loss factors, SRES %
- Treatment of non-flat tariffs

Some recent context...

Figure 3.9: AGL, EnergyAustralia and Origin flat rate market offers compared to all retailers as at 1 June 2018, 1 June 2019 and 12 July 2019

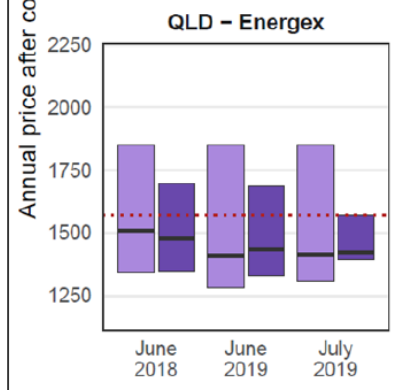
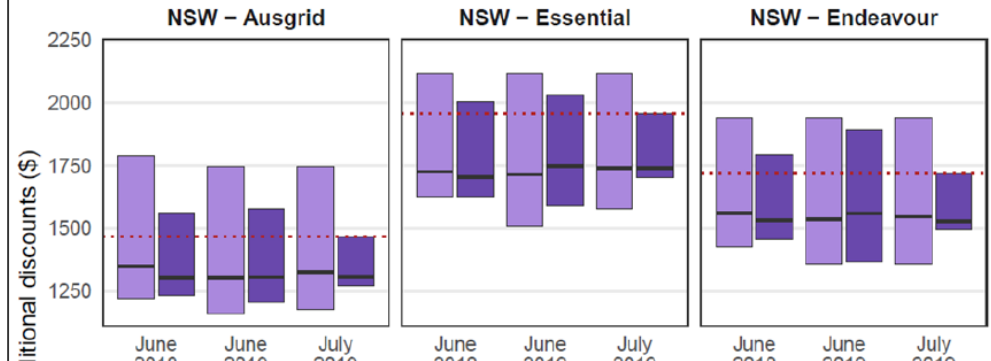
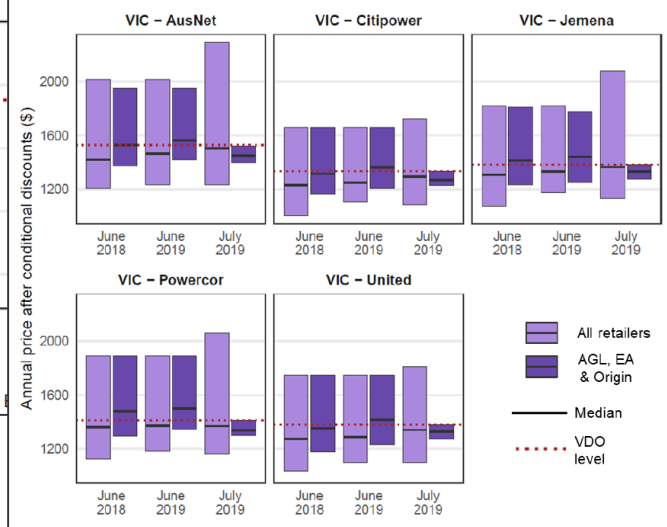


Figure 3.11: AGL, EnergyAustralia and Origin flat rate market offers compared to all retailers as at 1 June 2018, 1 June 2019 and 15 July 2019 in Victoria



Source: ACCC and AER analysis of Energy Made

Source: ACCC and AER analysis of Energy Compare data.

Power companies hike cheap deals by 9pc

JOHN ROLFE
THE first official data on the federal government's power price re-regulation reveals big hikes their prices as much as 9pc, partially adding to a year to date increase in the areas of the western Sydney and Blacktown or Wagga Wagga who seek out the most affordable tariff today would pay up to \$200 more than on the cheapest plan last year, based on using 7000kWh annually. The AER research emerged after The Daily Telegraph reported analysis, commissioned by St Vincent de Paul, had found second-tier retailers' more in-depth and hones in on the dominant retailers. The largest increase the AER identified was in the Endeavour Energy area of the western half of Sydney, Blue Mountains and Shoalhaven. Despite the best prices now being less attractive, AER chairwoman Paula Conboy (pictured) urged customers to shop around, saying it was the "key tool" at the public's



Pricing of big three energy retailers in ACCC's sights

Mark Ludlow
Big energy retailers AGL, EnergyAustralia and Origin Energy have increased default market offers for their customers, despite new laws introduced by the Morrison government aimed at driving down prices. The Australian Competition and Consumer Commission's latest report into the National Electricity Market said its initial analysis had found the government's price safety net had resulted in savings for those on standing offers of between \$130 and \$190 per household since July. But the price from customers the best deal from the big three retailers. The ACCC said the pricing EnergyAustralia customers were special deal are tariff, known as their energy rate. The ACCC today, found that had increased cheapest market south-east Queensland. "Other retailers not displayed the cheapest

NSW Average family's power bills jumps since re-regulation

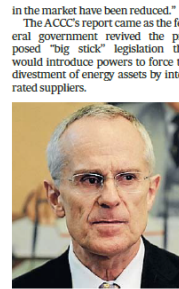
Western Sydney and regional NSW will be the hardest hit areas from the federal government's power price re-regulation, with even the cheapest electricity deals jumping by up to 9 per cent this year, research shows.

Power prices fall but discounts dry up

GEOFF CHAMBERS
FEDERAL POLITICAL CORRESPONDENT
Nearly 800,000 residential and small business customers have seen their power prices fall under the government's crackdown on energy costs, but discounts offered by the three biggest retailers have been reduced at the same time. Ahead of the government re-regulation its "big-stick" legislation in parliament this week, Energy Minister Angus Taylor and Josh Frydenberg said on Sunday that the Australian Competition & Consumer Commission had found "access to affordable and reliable" energy had improved. This followed the introduction of the Retail Electricity Code and establishment of the Default Market Offer, which came into effect on July 1. On Monday, the ACCC will release its second update since the establishment of its inquiry into the National Electricity Market, showing there had been a "significant fall in standing-offer prices". Despite cheaper energy offers and improved competition, the government will warn that there is "still more to do". The prices of the lowest market offers of the big three retailers — AGL Energy, Origin Energy and EnergyAustralia — have increased since the establishment of the DMO. The ACCC report, which says this trend may be offset as customers move to cheaper deals offered by smaller retailers, encourages consumers to shop around. The ACCC will monitor the pricing strategies of the big three retailers. "The government has long warned that energy companies must put their customers first, and the market practices the ACCC has described as 'unacceptable and unsustainable' must stop," the Treasurer and Mr Taylor said. "That is why the government is committed to passing our big-stick legislation, which complements the DMO and provides the ACCC with real teeth to hold power

Competition to rein in 'big three' over pricing

Retail offers
Angela Macdonald-Smith and Mark Ludlow
Competition tsar Rod Sims said he expected robust competition from smaller electricity retailers to force the country's "big three" retailers to reinstate their cheaper market offers for electricity that they have scrapped since the introduction of a default market price for power. "Obviously they are trying to recoup money on what they've lost on the outrageously high standing offers," Mr Sims said. The Australian Competition and Consumer Commission has found that AGL Energy, Origin Energy and EnergyAustralia had increased their cheapest market offers in NSW and south-east Queensland since the partial re-regulation of power prices on July 1. "As with all markets, our offers regularly change, but remain below the default offers and are among the best



Rod Sims says the debate over the "big stick" has moved on.

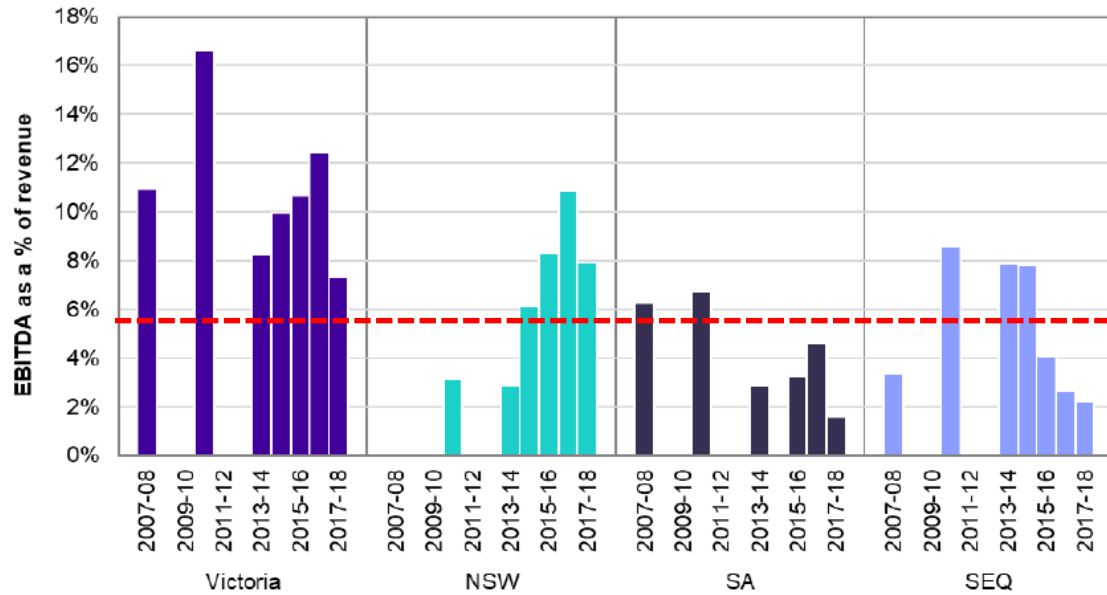
Aussies won't cop it

The federal government keeps telling the Australian people that electricity prices are falling, but evidence to the contrary arrives with every enormous power bill



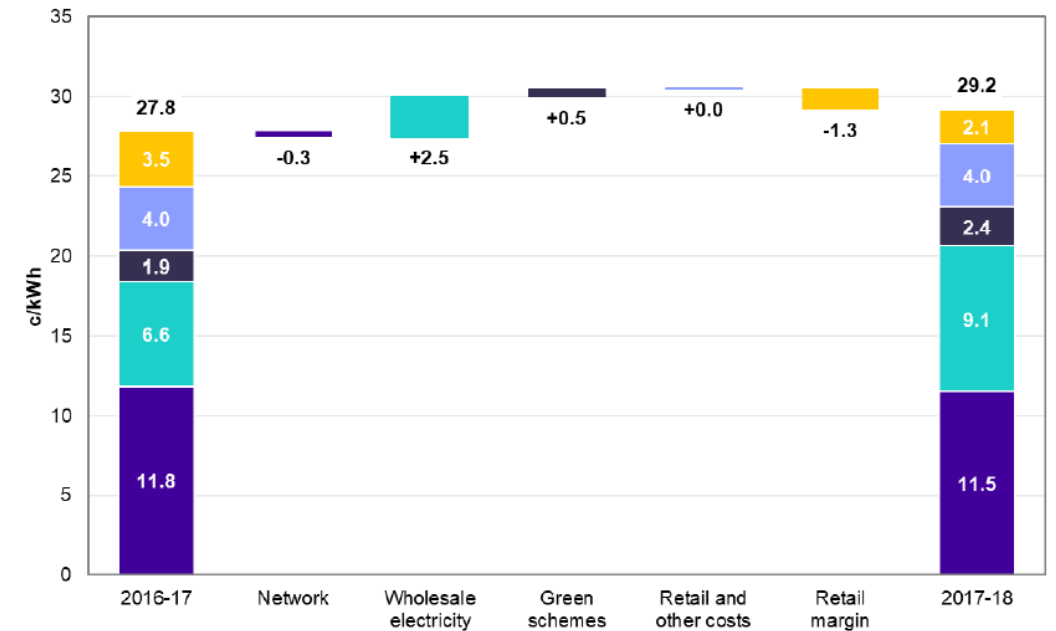
"Obviously the big three are trying to recoup money on what they've lost on the outrageously high standing offers", Rod Sims, 17 September

Figure 4.31 EBITDA as a percentage of revenue over time for residential customers by state 2007–08 to 2017–18



Source: ACCC analysis based on retailers' data.

Figure 4.11: Change in average Victorian residential effective price (c/kWh) from 2016–17 to 2017–18, real \$2017–18, excluding GST

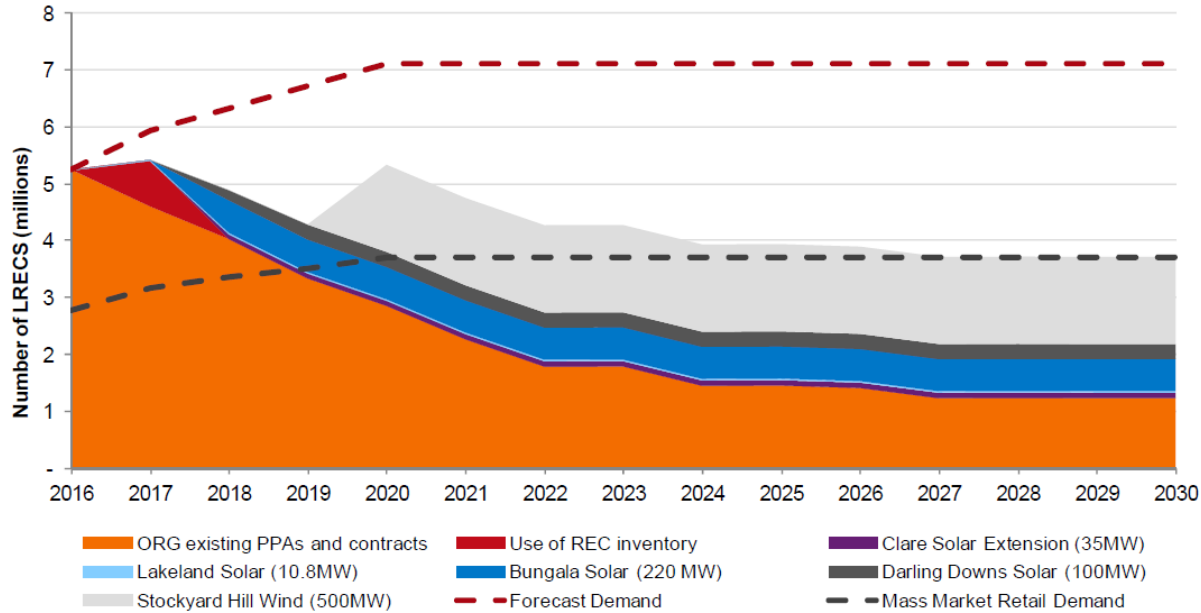


Source: ACCC analysis based on retailers' data.

*“The legislation focuses on three areas... The second is withholding supply from contract markets to substantially lessen competition. In **South Australia**, for instance, the lack of competition has meant there is little contracting to independent players, creating strong barriers for new competitors to enter an otherwise **attractive, high-priced market**. And the third is retail price gouging, in a market where **retail margins have more than doubled over a decade**.”* - Angus Taylor, ‘BIG STICK’ COMES OUT TO SHIFT POWER BALANCE IN FAVOUR OF CONSUMERS, 19 September 2019

LRET liability – the problem

Origin's LRET position¹



(1) REC liability based on growth in line with AEMO's system demand
 (2) Darling Downs Solar and Stockyard Hill Wind are based on management's estimates of the potential timing of development

Origin Energy | 2017 Half Year Results Announcement

Source: Origin Energy, 2017 Half year results, 16 February 2017

“Large-scale certificate spot and forward prices are **transparent**... represent **efficient costs** as they are the price at which the market currently trades these products. We believe this is efficient as a **retailer is able to purchase certificates** in this market.” – ESC draft decision

“The cost to a retailer of obtaining LGCs can be determined either on the basis of the resource costs associated with creating LGCs, or on the basis of the market price at which LGCs are traded. For this report, we have used a market price for LGCs to determine the cost of complying with the LRET.” – Frontier, for ESC

“Only a **small percentage of LGCs are traded** on the spot market, with most large-scale renewable projects entering into **PPAs with retailers** that include a bundled LGC price... LGCs are traded on the spot market in short-term quantities and thus pricing is influenced by the circumstances of those trades rather than long-term financing considerations.” – EY, for 2018 AEMC price trends report

LRET liability – potential solution

- Weighted average LGC cost for Vic market, based on LGC demand and supply
- Weights are proportion of each retailer’s LRET liability to VIC total
 - Geared towards larger retailers – top five supply ~90% of Vic mass market demand
 - These retailers hold significant national PPA portfolios
- Each retailer’s LGC price reflects supply allocation, proportionate to VIC demand
 - Prices and volumes under PPAs (actual contract data)
 - Assumed/ average LGC market price (if no PPAs, or short from PPAs)

	DEMAND			SUPPLY		
	Vic MM LGC Obligation (2020 19.96%)	MM LGC Demand National	Vic MM as a proportion of LGC portfolio	Retailers' National LGC PPA Offtake	Retailers' LGC Offtake Applied to Vic	LGC Offtake VWP
	C	D	E	F		
Source/Formula	ESC data	AER data	= C/D	Estimate	=MIN(C, E * F)	Estimate
	K LGC	K LGC	%	K LGC	K LGC	\$/LGC
AGL	462	3,000	15%	5,200	462	\$48.00
ORIGIN	383	3,100	12%	6,000	383	\$45.00
EA	382	2,100	18%	2,400	382	\$50.00
SNOWY (RED, LUMO)	339	605	56%	2,152	339	\$50.00
ENGIE (SIMPLY)	201	270	75%	783	201	\$50.00
ALINTA	75	285	26%	1,359	75	\$50.00
MOMENTUM (HYDRO TA)	67	90	74%	762	67	\$50.00
OTHER RETAILERS	205			1,000		\$50.00
	2,113			19,656	1,908	\$47.94

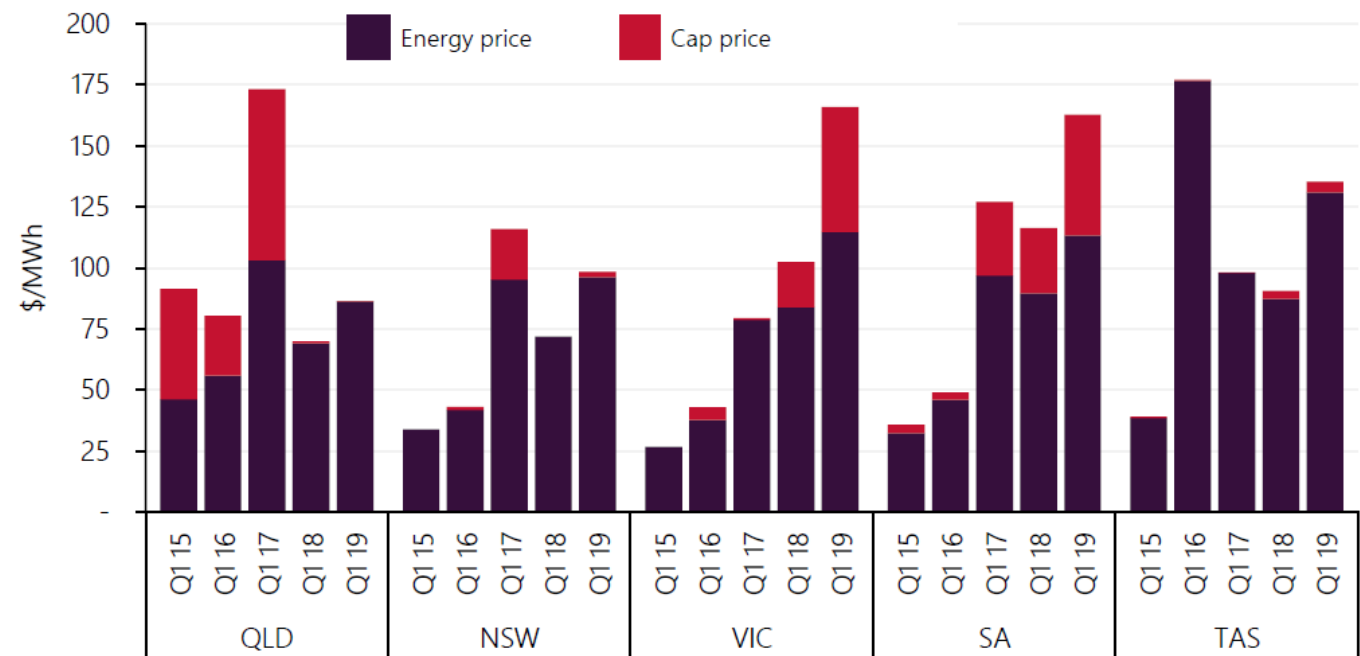
Source: EnergyAustralia. Numbers are illustrative only

Wholesale costs

- EnergyAustralia has previously supported Frontier’s general method, no specific concerns on cost estimates – “no right answer” – more about transparency
- Questions over historic data in forming expectations for 2020. Dataset (3 years) may not have enough observations (or too many) to capture volatility trend and shaping costs associated with VRE penetration

- average consumption falling but peak load not moving, still need same number of caps, cost spread over a smaller MWh base
- Trends most visible in SA, QLD
- Materiality for Vic, probable events/risks for Q1:2020 (plant outages, commissioning of solar etc?)
- Ideally would construct a forward projection of the Victorian system to examine shape cost impacts

Figure 5 Average wholesale electricity price by region



Source: AEMO Quarterly Energy Dynamics - Q1 2019, May 2019

Metering

- ESC assume single phase, single element meters. Material proportion (20 to 40%) of customers have more expensive meters (e.g. 3 phase). Suggest using weighted average.
- Scale of impact (esp. Ausnet) ~1% of total bill

Tariff Approval - AusNet Services	Proposed Metering Tariffs P(t) for 2019	Forecast Quantities (Qt) for 2019	
Proposed tariff	PropTar \$/Cust/year	FcastVol Cust #	Cust %
Single phase single element	57.80	426,623	56.4%
Single phase, two element with contactor	67.90	192,622	25.5%
Multiphase	82.10	68,970	9.1%
Multiphase, direct connected with contactor	90.20	64,284	8.5%
Multiphase Current Transformer connected	116.90	4,185	0.6%
weighted avg	\$ 65.67		
diff to SPSE	\$ 7.87		

Source: EnergyAustralia from Ausnet 2019 approved tariff model

Loss factors

- AEMO publishes two DLFs – long and short sub-transmission
- ESC use short DLF, understating actual losses. More of an issue for Ausnet and Powercor customers. Suggest using weighted average (as per amaysim submission)
- Scale of impact ~0.5% of total bill

SRES percentage

- CER non-binding STP for 2020 is 14.26%, lower than the current 21.73%.
- Expect % to increase given government subsidies, potential for retailers and customers to face an unnecessarily large true-up. Suggest using binding 2020 value as a placeholder.
- Scale of impact ~1% of total bill

Non-flat VDO tariffs

- Our recommendation is to prescribe individual prices, alongside maximum bill amounts for reference pricing purposes
- ESC hasn't assessed this as an option
- Not clear from ESC draft but presume it has questions around Order requirements – we think this still satisfies Order, particularly VDO Objective
- Some retailers may prefer flexibility – we don't want it, customers also likely to be suspicious

Power bill banditry

FAMILIES that have tried to find a decent deal on power face paying hundreds of dollars a year more as greedy retailers game reforms meant to bring down bills.

The Courier-Mail can reveal providers have exploited vagueness in the July 1 changes to hide usage charge hikes of up to 57 per cent.

[Home](#) > [Electricity](#) > Why families need to check their energy rates – right now

Why families need to check their energy rates – right now

Posted by [Jared Mullane](#) 02/08/2019

Families or large households across the country should take some time to review their energy plans in light of Canstar Blue research which shows a notable jump in the electricity usage rates being charged by retailers on market offers.

Canstar Blue's analysis of pricing movements shows that most retailers have started to weight their products more heavily towards usage rates rather than supply charges, meaning households that use lots of energy may be worse off than they were prior to the July reforms.

Electricity plans are made up of two main components – electricity [usage rates](#), which are the per kWh costs that households incur for using power, and [supply charges](#) – which are fixed, daily costs for being connected to the grid.

Criterion	Approach 1 (average max bill)	Approach 2 (all bills capped)
Safeguard for disengaged customers	✓✓✓ Broad safeguard – average bill is capped	✓✓✓ Specific safeguard - individual bills are capped
Based on efficient costs	✓✓ Retailers can set tariffs to recover costs	✓ Less flexibility to recover costs (esp network) as each customer’s bill is capped
Long term interest of consumers	✓✓	✓
<i>Administrative costs of regulation</i>	✓✓ Up front design and publication of tariffs and representative consumption determines compliance	✓ Costs associated with reviewing bills and applying credits, transferring customers onto flat network tariffs.
<i>Regulatory consistency</i>	✓✓ More aligned with DMO and approach to calculating discounts in Victoria	✓ No real alignment with other similar regulations
<i>Efficiency in the industry</i>	✓✓ Flexibility for retailers to design tariffs to recover costs	✓ Cross-subsidisation by customers with bills below the maximum annual cap, including the removal of cost reflective price signals

Criterion	Approach 1 (average max bill)	Approach 1A (average max bill and prescribed prices)
Safeguard for disengaged customers	✓✓✓ Broad safeguard – average bill is capped	✓✓✓+ Specific safeguard – same prices apply regardless of consumption
Based on efficient costs	✓✓ Retailers can set tariffs to recover costs	✓✓✓ Prices are set to recover actual network costs
Long term interest of consumers	✓✓	✓✓✓
<i>Administrative costs of regulation</i>	✓✓ Up front design and publication of tariffs and representative consumption determines compliance	✓✓✓ Retailers still have to gazette prices, but these are identical to ESC determination
<i>Regulatory consistency</i>	✓✓ More aligned with DMO and approach to calculating discounts in Victoria	✓✓✓ Same approach as flat tariff VDO
<i>Efficiency in the industry</i>	✓✓ Flexibility for retailers to design tariffs to recover costs	✓✓✓ No cross-subsidies, price signals in network tariffs preserved

Criterion	Approach 1 (average max bill)	Approach 1A (average max bill and prescribed prices)
VDO objective - Simple, trusted option	✓✓ Depends on customer recognition of average reference bill, trust in retailer to set prices	✓✓✓ Prices are transparent, set by the regulator, easy to explain to customers
Satisfies other requirements of the order	✓✓ Appears to be what the drafters intended	✓? Setting prices is additional to Order requirement to determine maximum annual bill Maximum bill must be “based on” flat VDO prices – how to give effect to this?
Ease for the Commission	✓✓? Bill amount same as flat VDO reference price (subject to cost reflectivity issues)	✓? Prices need to be determined for all (most?) non-flat standing offer tariffs

Lawrence Irlam

Industry Regulation Lead | Enterprise

T. +61 3 8628 1655

Lawrence.irlam@energyaustralia.com.au

energyaustralia.com.au



EnergyAustralia
LIGHT THE WAY

WHOLESALE ELECTRICITY COST



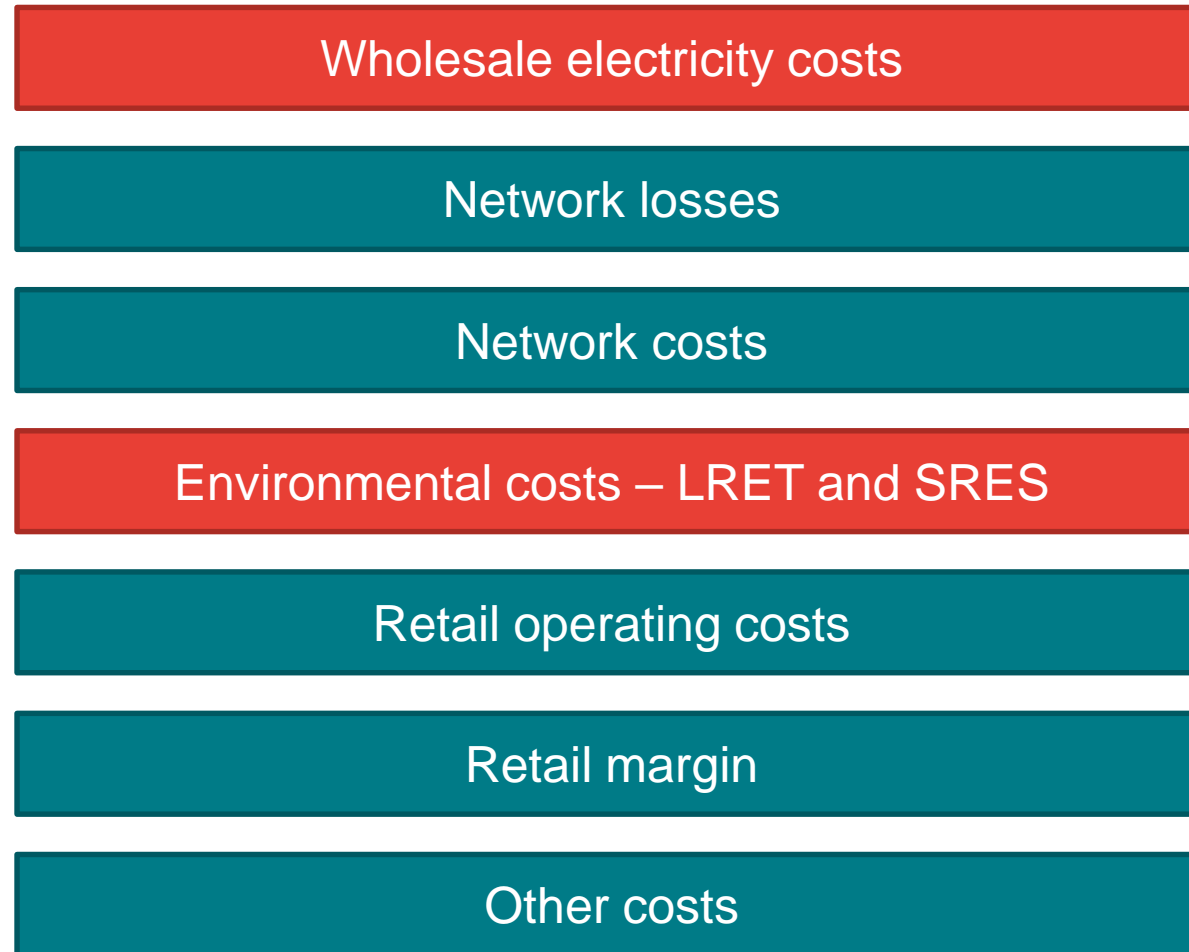
Prepared for the ESC's Victorian Default Offer Draft Decision public forum

8th October 2019



1. Our engagement

FRONTIER HAS BEEN ENGAGED TO ADVISE ON TWO COMPONENTS OF THE VDO FOR 2020



2. Methodology – wholesale electricity costs

OUR PROPOSED METHODOLOGY

- Retailers in the NEM must buy the electricity that their customers use from the wholesale spot market.
- Because the wholesale spot price is volatile, retailers typically seek to purchase derivative contracts or enter other arrangements so that their costs are more stable.
- We are seeking to estimate what the cost of these arrangements will be for a prudent retailer supplying a representative residential customer and a representative small business customer.
- We propose to use a **market-based methodology** to estimate wholesale electricity costs – this estimates the average annual cost to a retailer of settlement with AEMO for its electricity purchases and difference payments for financial hedging contracts.

OUR PROPOSED METHODOLOGY

- To implement our market-based methodology, we need to answer four questions:

1. What is the likely half-hourly load of retailers' customers?

- Based on historical MRIM data

2. What are the likely half-hourly spot prices that retailers will face?

- Based on historical spot prices

3. What is the cost of financial hedging contracts available to retailers?

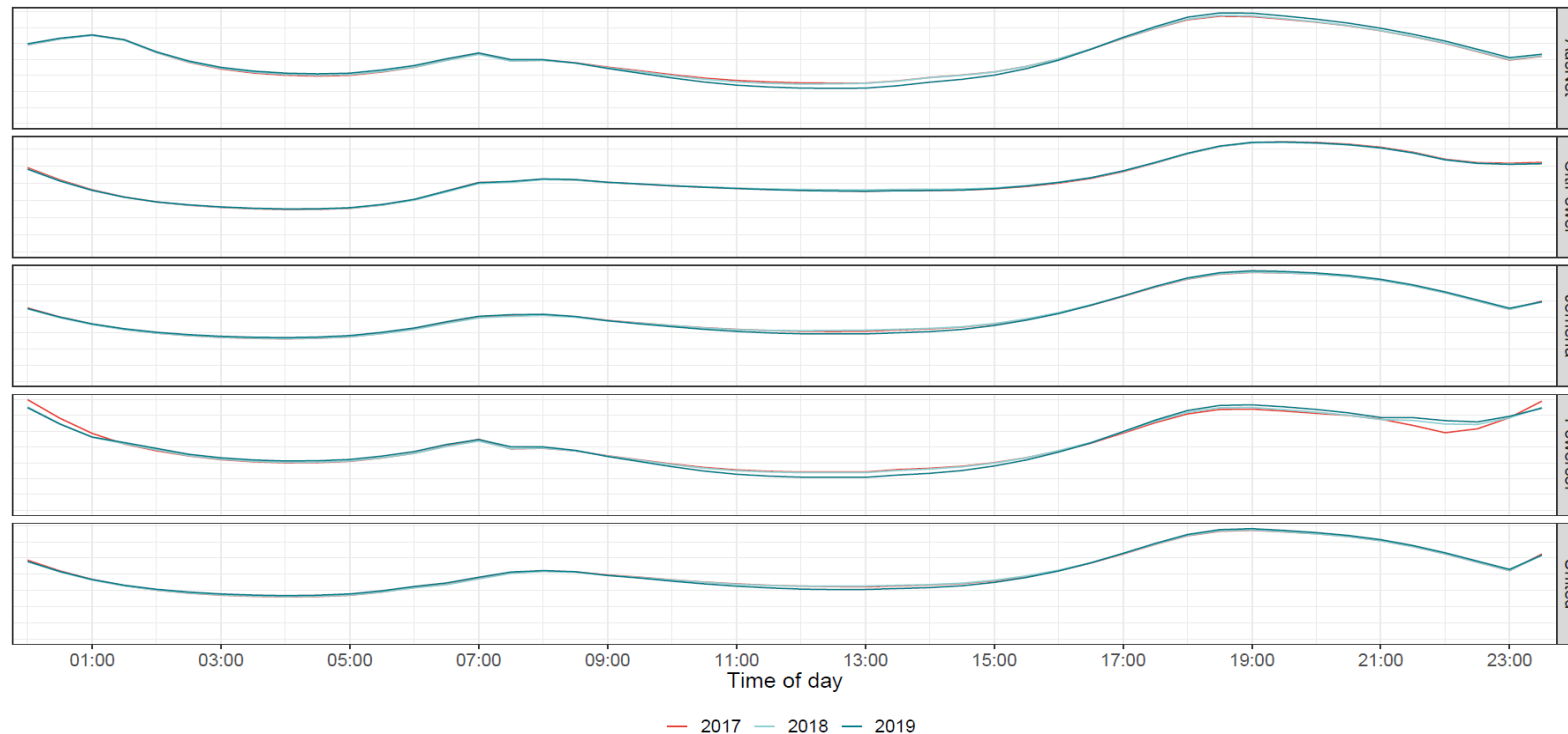
- Based on ASXEnergy contract prices

4. What kind of hedging position is a prudent retailer likely to adopt?

- Based on STRIKE modelling

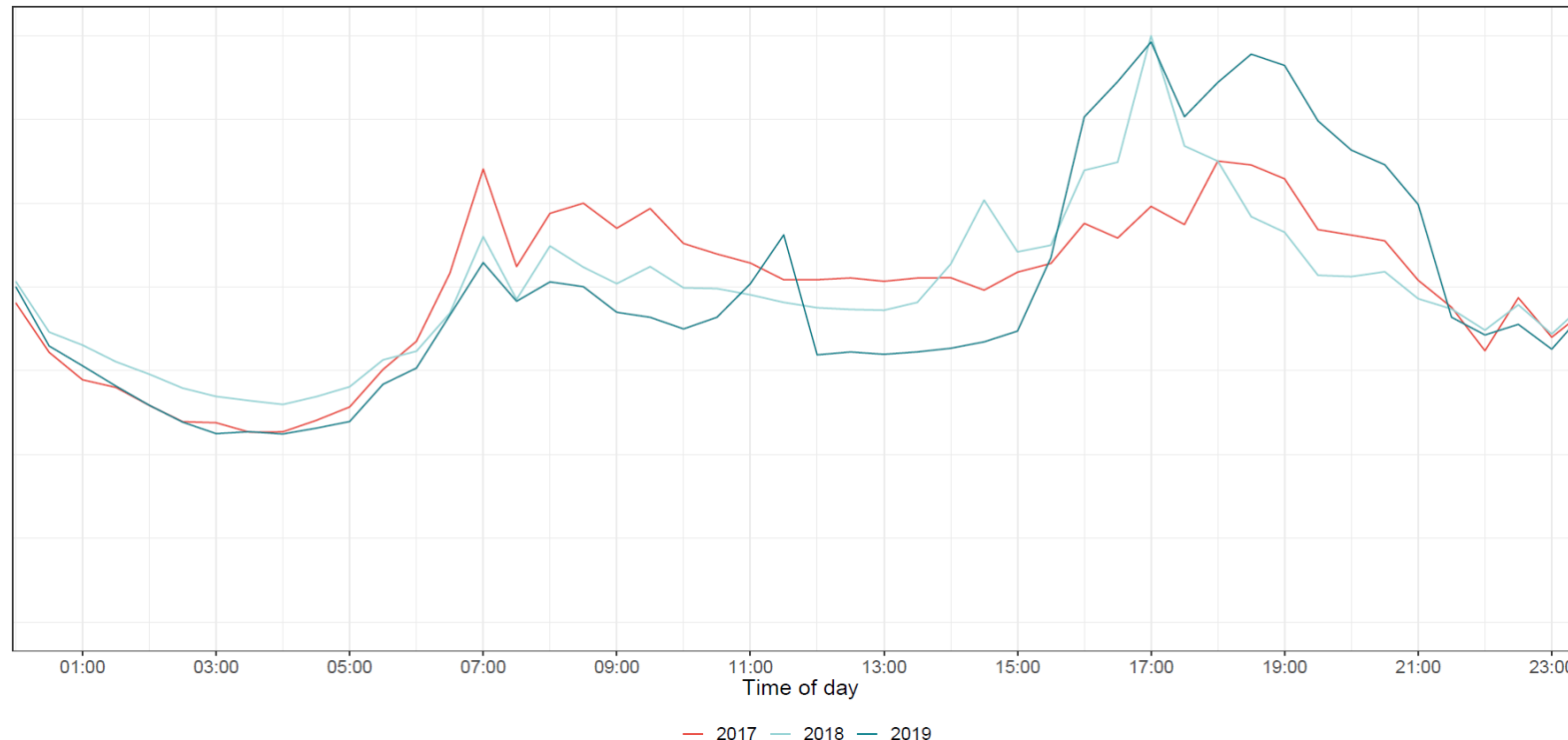
1. WHAT IS THE LIKELY HALF-HOURLY LOAD OF RETAILERS' CUSTOMERS?

- What matters for the wholesale electricity cost for retailers is the half-hourly pattern of consumption of retailer's customers, including its relationship to the half-hourly pattern of spot prices
- In our view, the best information on this is the MRIM data published by AEMO for each Victorian DNSP



2. WHAT ARE THE LIKELY HALF-HOURLY SPOT PRICES THAT RETAILERS WILL FACE?

- It is crucial that the **half-hourly pattern** of electricity spot prices is properly related to the half-hourly pattern of consumption of retailer's customers



3. WHAT IS THE COST OF FINANCIAL HEDGING CONTRACTS AVAILABLE TO RETAILERS?

- Financial hedging contracts are traded on the ASX, and daily prices are available
- Contracts trade for several years
- ESC's decision for 2019/20 was to use 12-month average ASX prices to determine the price of hedging contracts

4. WHAT KIND OF HEDGING POSITION IS A PRUDENT RETAILER LIKELY TO ADOPT?

- Even when only considering standard ASXEnergy hedging contracts, there are many difference hedge positions available to retailers
- We propose to use our portfolio optimisation model – *STRIKE* – to determine the efficient hedge position of a prudent retailer
- *STRIKE* applies the concepts of portfolio theory to determine the efficient hedge positions available to a retailer

3. Methodology – environmental costs

OUR PROPOSED METHODOLOGY

- Retailers in the NEM must buy renewable certificates (LGCs and STCs) to meet their obligations under the Commonwealth renewable targets
- We are seeking to estimate what the cost of purchasing these certificates will be for a prudent retailer supplying a representative residential customer and a representative small business customer.
- We propose to use a **market-based methodology** to estimate wholesale electricity costs – under this approach we multiply the market-based price of a certificate by the number of certificates a retailer is required to surrender

4. Discussion

WE APPLY ECONOMICS TO MARKETS, ORGANISATIONS AND POLICIES

Frontier Economics specialises in utility regulation, transaction advisory services, market reform, trade practices, competition analysis and public policy evaluation.

We use economics to help clients improve performance, make better decisions and keep ahead of the competition.

We have offices in Australia (Brisbane, Melbourne and Sydney), Singapore and a sister company that operates in Europe.

We work with a wide range of clients from the private sector, government, regulators, and other public authorities.

We work across a wide range of industries from airports to water networks. Our cross-industry experience means that we can transfer commercial and regulatory insights between sectors to bring fresh, new perspectives to all the work we do.

Because we work globally, we can offer commercial and regulatory experience from a wide range of markets, including Australia, New Zealand, Asia and Europe to support clients successfully.

We can draw on expertise from 200 consulting economists around the world. Our international team gives us coverage across multiple time zones and allows us to turn around deliverables rapidly.



*We apply **economics** to markets, organisations and policies*