Queensland Competition Authority

Final determination

Regulated retail electricity prices for 2016–17

May 2016

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EXECUTIVE SUMMARY

The Queensland Competition Authority (QCA) has made a final determination of regulated retail electricity prices (notified prices) to apply in regional Queensland from 1 July 2016 to 30 June 2017. In general, notified prices are paid by customers who have not entered into a negotiated or market contract with their retailer. Notified prices are available to residential, small business and large business customers in regional Queensland. As retail electricity prices in south east Queensland will be deregulated from 1 July 2016, notified prices will not be available to customers in this region.

We began our review in November 2015 under a delegation from the Minister for Energy and Water Supply. We appreciate the valuable contribution that stakeholders have made to our review, especially those who attended workshops and made submissions. While we have not necessarily referred to all arguments or submissions in this determination, we have carefully considered the issues raised in each submission.

Our approach to setting notified prices for 2016–17 is largely consistent with previous years. In accordance with the Queensland Government's Uniform Tariff Policy (UTP), we have continued to base notified prices for residential and small business customers on the costs of supplying electricity in south east Queensland. We have also continued to base notified prices for large business customers on the lowest cost of supply in regional Queensland.

We have also undertaken a detailed review of retail costs (which include the costs of customer administration, call centres, billing and IT systems, and a retail margin) so that our estimates of these costs are based on the latest information, including observations from competitive retail electricity markets in Australia.

Our final determination is based on the most up-to-date information available at the time of publication. As with previous determinations, we have received updated information on the estimated costs of supply since the publication of the draft determination and have revised our estimates accordingly. In particular, Energex and Ergon Distribution have provided updated network charges, and ACIL has provided revised energy cost estimates. Consequently, most notified prices have increased between our draft determination and final determination. For example, the notified prices for tariff 11 and tariff 20 have both increased between the draft determination and the final determination. The higher tariff 11 notified price (compared to the draft determination) is due primarily to higher network and energy costs, while the higher tariff 20 notified price is due primarily to higher retail, energy and network costs.

Impacts on residential customers[1]

The main retail tariff for residential customers is tariff 11. Many customers on tariff 11 are also on one of the 'off-peak' or 'controlled load' tariffs (tariffs 31 and 33) for uses such as water heating and pool pumps.

In 2016–17, the annual bill for a typical customer on tariff 11 will increase by 2.8 per cent from $1,457 to $1,498. For a typical customer on a combination of tariffs 11 and 31 or tariffs 11 and 33, the increases will be slightly higher (4.8 per cent and 3.1 per cent respectively). However, the impact on individual customers will vary depending on their consumption. Annual bills for tariff 11 customers with lower consumption than the typical customer will either decrease or increase by less than 2.8 per cent. Almost one-third of

[1] The bill impacts presented are based on typical levels of consumption. The typical customer data was supplied by Ergon Retail and represents the median customer for all customers on the stated tariff. See Appendix H for further information. Please note that the annual bill amounts in Figure 1 have been rounded to the closest dollar.

customers on tariff 11 will face lower annual bills in 2016–17 compared to 2015–16. Annual bills for tariff 11 customers with higher consumption than the typical customer will increase by more than 2.8 per cent.

The increase in typical tariff 11 customer bills is primarily due to higher energy costs. Our consultant, ACIL, advised that the rise in energy costs is driven largely by increasing demand from liquefied natural gas plants, and higher Renewable Energy Target costs. Some of the impact of higher energy costs has been offset by a decrease in network costs. For lower consumption customers, the outcome of the review of retail costs has also helped to offset the impacts of higher energy costs as it has reduced the level of fixed retail costs.

Figure 1 Annual bills for typical residential customers (GST inclusive)

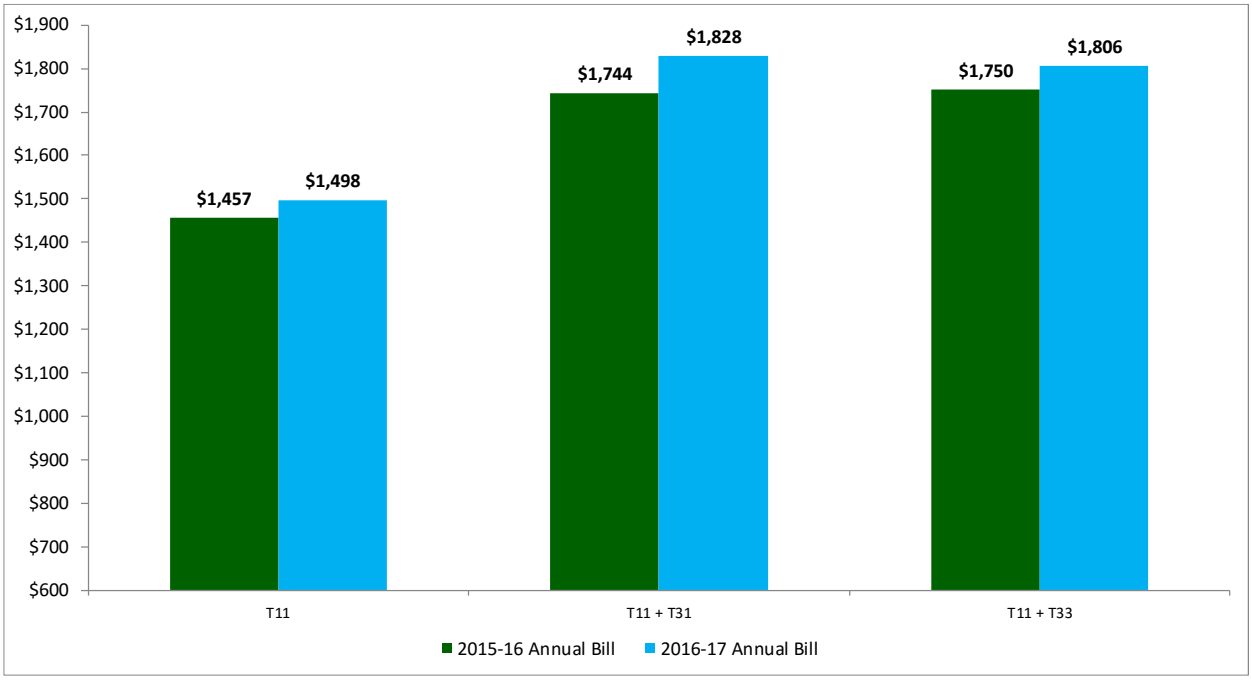


Table 1 Tariff 11 charges (GST exclusive)

	2015–16 Final Determination	***2016–17 Final Determination***	***Change (%)***
Fixed charge (cents/day)	106.728	89.572	-16.1%
Variable charge (cents/kWh)	22.238	24.610	10.7%

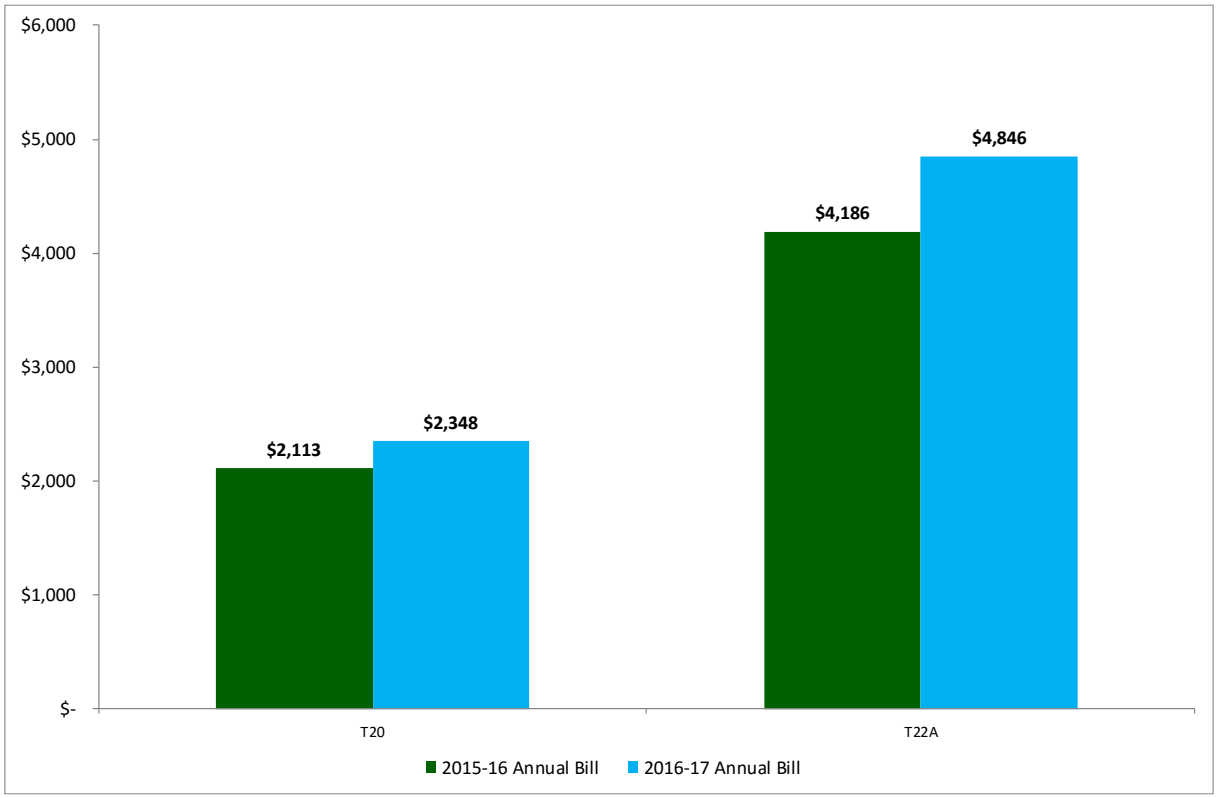
Impacts on small business customers[2]

In 2016–17, typical customers on the main small business tariff (tariff 20) will face an increase of $236[3] or 11.2 per cent in their annual bill. Typical small business customers on the seasonal time-of-use tariff (tariff 22A) will face an increase of $660 or 15.8 per cent. These increases have been driven primarily by higher energy costs and retail costs. Bill impacts will vary depending on each individual customer's level and pattern of consumption.

[2] The bill impacts presented are based on typical levels and patterns of consumption. The typical customer data was supplied by Ergon Retail and represents the median customer for all customers on the stated tariff. See Appendix H for further information. Please note that the annual bill amounts in Figure 2 have been rounded to the closest dollar.

[3] Please note that this figure does not equal the difference between the annual bill amounts for tariff 20 in Figure 2 ($235), due to rounding of the amounts in Figure 2.

Figure 2 Annual bills for typical small business customers (GST inclusive)

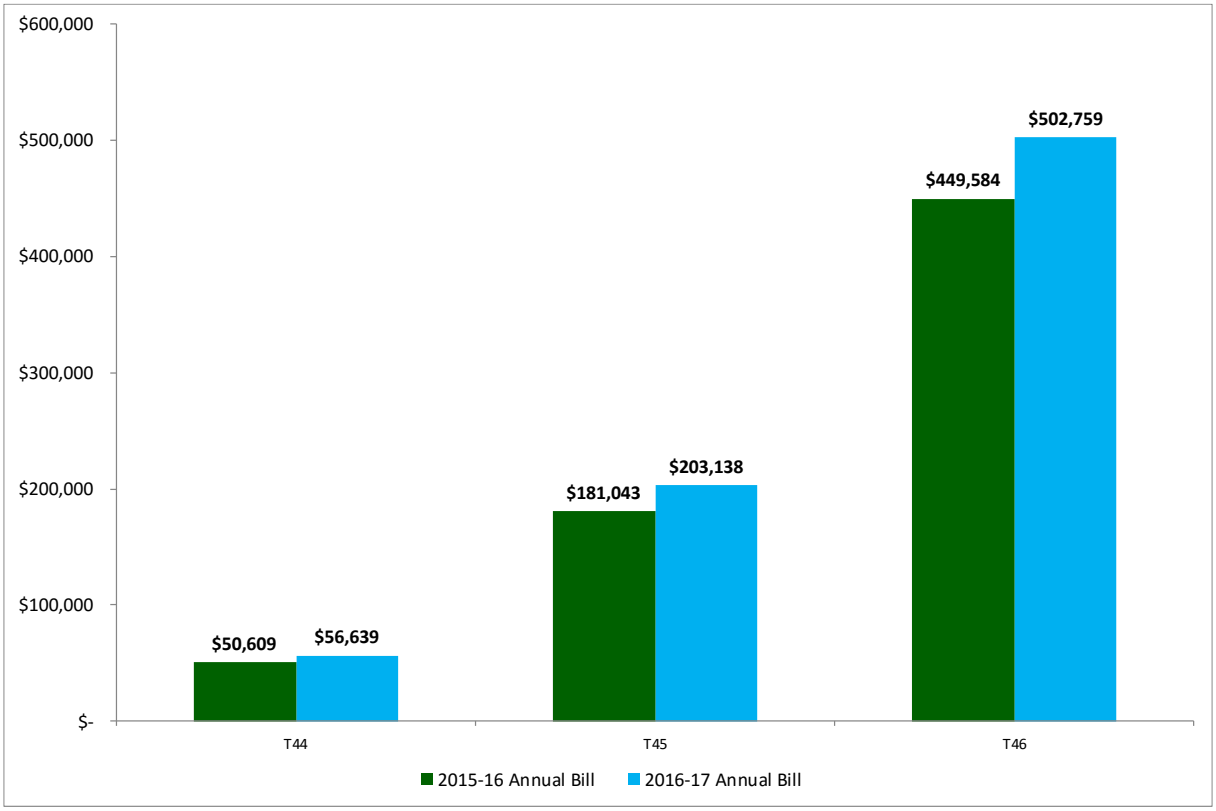


Impacts on large business customers[4]

In 2016–17, typical large business customers will face increases in their annual bills of between 11.8 per cent and 12.2 per cent. The increases have been driven primarily by higher energy costs and network costs. Bill impacts will vary depending on each individual customer's level and pattern of consumption.

[4] The bill impacts presented are based on typical levels and patterns of consumption. The typical customer data was supplied by Ergon Retail and represents the median customer for all customers on the stated tariff. See Appendix H for further information. Please note that the annual bill amounts in Figure 3 have been rounded to the closest dollar.

Figure 3 Annual bills for typical large business customers (GST inclusive)



Arrangements for customers on obsolete and transitional tariffs

Some business customers are supplied under transitional or obsolete tariffs, which include farming and irrigation tariffs. These tariffs have been made available for several years to allow customers to transition to standard business tariffs and recoup some of the investments made to suit the level and structure of transitional or obsolete tariffs. Based on information from Ergon Retail, many customers on these tariffs may face lower electricity bills if they moved to a standard business tariff, but some customers would face much higher bills.

We have maintained transitional arrangements for 2016–17. Our general approach in past determinations has been to increase the charges in each transitional and obsolete tariff in line with the percentage increases in the standard business tariffs customers would otherwise pay. We have then generally applied an additional escalation factor to limit charges for transitional and obsolete tariffs falling further below cost in dollar terms.

Standard business tariffs will increase in 2016–17 so transitional and obsolete tariffs will also need to increase. Under our general approach in previous determinations, the escalation factors for most of these tariffs in 2016–17 would be 1.25 or 1.5.

However, given the substantial price increases that customers on transitional and obsolete tariffs have experienced in recent years and that customers on these tariffs are more than halfway through the transition to standard business tariffs, we have decided to apply the minimum escalation factor of 1.1. This means customers on these tariffs will face increases of between 12.3 per cent and 13.2 per cent in 2016–17 rather than up to 16.8 per cent if the higher escalation factors were applied.

New customers will also continue to be allowed to access transitional tariffs.

THE ROLE OF THE QCA – TASK, TIMING AND CONTACTS

The Queensland Competition Authority (QCA) is an independent statutory authority to promote competition as the basis for enhancing efficiency and growth in the Queensland economy.

The QCA's primary role with respect to electricity pricing is to set regulated retail electricity prices in accordance with the requirements of the delegation from the Minister for Energy and Water Supply (Appendix A) and the *Electricity Act 1994* (the Electricity Act).

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1 INTRODUCTION

The Queensland Competition Authority (QCA) has received a delegation from the Minister for Energy and Water Supply (the Minister) to determine regulated retail electricity prices (notified prices). The delegation specifies that the notified prices we determine will apply to non-market customers in the Ergon Energy Corporation Limited (Ergon Distribution) distribution area from 1 July 2016 to 30 June 2017 (see Appendix A).

The Queensland Government (the Government) has legislated to remove retail price regulation in the Energex distribution area (covering south east Queensland) from 1 July 2016. As a result, notified prices will only apply to customers in Ergon Distribution's distribution area.[5]

1.1 The review process

On 11 December 2015, we released an interim consultation paper advising interested parties of the commencement of the review. We received 12 submissions in response (see Appendix B).

On 23 March 2016, we released our draft determination and ACIL's draft reports on the cost of energy and retail costs. In April 2016, we held workshops in five locations (Brisbane, Bundaberg, Cairns, Toowoomba and Townsville) to discuss the draft determination, and a webinar hosted by the Chamber of Commerce and Industry Queensland. We received 70 submissions to the draft determination (see Appendix B).

This final determination publishes final regulated retail tariffs and prices for 2016–17 and explains how they were determined. In making our final determination, we have taken into account the requirements of the *Electricity Act 1994* (the Electricity Act) and the delegation, matters raised in submissions, ACIL's final reports on the cost of energy and retail costs, and our own investigations.

We appreciate the valuable contribution that stakeholders have made to this process, especially those who attended workshops and made submissions. While we have not necessarily referred to all arguments or submissions in this report, we have carefully considered each submission. Issues raised in submissions that are outside the scope of our review are discussed in Appendix C.

All non-confidential documents relating to this review are available on our website.[6]

[5] Note that customers in the Essential Energy distribution area in southern Queensland do not have access to notified prices, although Origin Energy receives a subsidy from the Queensland Government to ensure that non-market customers pay no more than similar customers that have access to notified prices.

[6] http://www.qca.org.au/Electricity/Regional-consumers/Reg-Electricity-Prices/In-Progress/Regulated-Electricity-Prices-2016-17.

2 LEGISLATIVE REQUIREMENTS AND PRICING FRAMEWORK

When we receive a delegation to determine notified prices, we must make the determination in accordance with our obligations under the Electricity Act. In this chapter, we explain these obligations, as well as how we decided on the framework we applied to set notified prices for 2016–17.

2.1 Legislative requirements

The Electricity Act does not specify criteria or principles that we must apply when making a price determination. Rather, we are directed to have regard to various matters. In accordance with section 90(5) of the Electricity Act, the matters we are required to have regard to in making a determination are:

- the actual costs of making, producing or supplying the goods or services
- the effect of the price determination on competition in the Queensland retail electricity market
- any matter required by delegation
- any other matter we consider relevant.

When we make a determination, we also have regard to the objects of the Electricity Act, which are to:

- set a framework for all electricity industry participants that promotes efficient, economical and environmentally sound electricity supply and use
- regulate the electricity industry and electricity use
- establish a competitive electricity market in line with the national electricity industry reform process
- ensure that the interests of customers are protected
- take into account national competition policy requirements.

2.1.1 Key matters we are required to consider by delegation

The delegation sets out additional matters we are required to consider. Consistent with the approach of previous price determinations, we are required to consider applying the network (N) plus retail (R) cost build-up methodology and the Queensland Government's uniform tariff policy (UTP).

When determining the network cost component, we must consider continuing with the same general approach we applied in the 2015–16 determination. For residential and small business customer tariffs, this means using Energex's network charges and tariff structures for non–time-of-use tariffs (i.e. tariffs 11, 20, 31, 33, 41 and 91[7]). Adopting this approach means that network charges would be below cost, because they would be based on network costs in south east Queensland, not regional Queensland. This is consistent with the Government's UTP. As stated

[7] Tariff 91 applies to unmetered supplies (except street lighting).

in the delegation, the UTP 'provides that, wherever possible, non-market customers of the same class should pay no more for their electricity, regardless of their geographic location'.[8]

The Minister's covering letter clarifies how the Government expects the UTP to apply for residential and small business customers (small customers):

> *… [R]egulated prices in regional Queensland for small customers should broadly reflect the expected prices for customers on standing offers in south east Queensland.*[9]

For small customer time-of-use and seasonal demand tariffs (i.e. tariffs 12A, 14, 22A and 24) we must also consider basing the network cost component on the price level of Energex's network charges, while utilising the relevant Ergon Distribution network tariff structures. Under this approach, network charges would still be below cost, while (because Ergon Distribution's tariff structures are used) price signals would improve and customers would be encouraged to reduce usage during peak periods, as pointed out in the delegation.

For large business customer tariffs, we must consider using Ergon Distribution's network charges. This is the approach we have adopted in previous decisions.

We are also required to consider maintaining transitional arrangements for transitional and obsolete tariffs, which include farming and irrigation tariffs.

2.2 Pricing framework

The matters we are required to consider according to the Electricity Act and the objects of the Electricity Act indicate that cost-reflective prices and promoting retail competition are important guiding principles. Cost reflectivity is important for efficiency and equity reasons. Previous determinations have also been designed to support retail competition in south east Queensland and the large business customer segment in regional Queensland.

These principles conflict with the requirement in the delegation to consider the Government's UTP.

2.2.1 Residential and small business customers

Given that we are required to consider conflicting matters in making our price determination, we have explored a spectrum of possible pricing approaches. These range from setting fully cost-reflective prices to basing notified prices on the cost of supply in south east Queensland (our previous approach).

Cost base

Setting cost-reflective notified prices (in this context, prices that reflect the costs of supplying customers in each region of Ergon Distribution's area) would avoid the need to subsidise electricity prices and promote retail competition. However, network costs vary across regional Queensland. Setting cost-reflective prices would result in notified prices for customers that varied by region, which would be inconsistent with the Government's UTP. It would also lead to significant price increases, particularly for customers in western parts of the state and those supplied by isolated systems.[10]

[8] Section 5(b) of the Minister's delegation (Appendix A to this document).
[9] Cover letter of the delegation (Appendix A to this document).
[10] A typical tariff 11 customer paying cost-reflective prices in 2015–16 would pay around 120 per cent more in western Queensland than customers on notified prices in south east Queensland.

Notified prices could also be set to reflect the lowest costs of supply in regional Queensland[11], which is the approach we have used to set notified prices for large business customers since 2012. This approach would mitigate adverse price impacts for some customers and maintain uniform tariffs. Compared to our approach in previous determinations, it would improve cost-reflectivity and reduce the subsidy paid by taxpayers to subsidise electricity prices. However, it would be inconsistent with the UTP and may result in significant price increases. For example, in 2015–16, the costs of supplying residential customers in the east pricing zone were about 23 per cent higher[12] than in south east Queensland.

At the other end of the spectrum, notified prices could continue to be based on the costs of supply in south east Queensland. This would be consistent with the UTP and the requirement in the delegation to consider basing the network cost component on Energex price levels. However, it would result in customers continuing to pay much less than the cost of supply, potentially leading to inefficient investment and decision-making, as well as ongoing costs to taxpayers.

Cotton Australia, Ergon Energy Queensland (Ergon Retail), Master Electricians Australia and the Queensland Farmers' Federation (QFF) supported an approach based on south east Queensland costs. The Chamber of Commerce and Industry Queensland (CCIQ) considered that notified prices based on the cost of supply in regional Queensland would be prohibitively expensive for small business customers. Canegrowers argued that the UTP subsidy should apply to the N component, and that the R component should be set based on the costs of supply in regional Queensland, including energy costs.

QCA position

We have decided to base notified prices for residential and small business customers on the cost of supply in south east Queensland. We consider this reasonable because it is consistent with the Government's UTP, which provides for notified prices to be based on the costs of supply in south east Queensland. This approach also avoids the potentially large price increases associated with the other approaches.

Framework to determine notified prices

To establish an appropriate framework for setting notified prices based on the costs of supply in south east Queensland, we have considered the Government's policy that notified prices for small customers in regional Queensland should broadly reflect the expected prices for customers on standing offers in south east Queensland.[13]

Customers on standing offers are supplied on a standard retail contract[14], as defined under the National Energy Customer Framework (NECF). In areas where there is retail competition, customers may opt for a market contract. Market contracts often have different terms and conditions to standard retail contracts, and prices under market contracts can be lower than standing offer prices.

Customers who do not, or cannot, opt for market contracts are, by default, supplied understanding offers. In markets without price regulation, as will be the case in south east Queensland from 1 July 2016, standing offer prices are set by retailers.

[11] Ergon Distribution's east pricing zone, transmission region one.
[12] This is the estimated impact in 2015–16 on a typical tariff 11 customer in the Ergon Distribution east pricing zone (transmission region one) paying cost-reflective notified prices.
[13] Cover letter of the delegation (Appendix A to this document).
[14] Schedule 1, National Energy Retail Rules.

Ergon Retail supported setting notified prices based on expected standing offer prices in south east Queensland, in line with the Government's UTP. However, Canegrowers, Canegrowers Isis, CCIQ, Cotton Australia and QCOSS argued that notified prices should be set below expected standing offer prices in south east Queensland. CCIQ and QCOSS argued that the QCA should base notified prices somewhere between market contract prices and standing offer prices. Cotton Australia acknowledged that the delegation specified that small customer prices should be set at standing offer levels under the UTP, but argued that it would be more appropriate to base prices on the average discounted offer in south east Queensland. Canegrowers Isis argued that prices should be based on a weighted average of all prices available in south east Queensland.

QCA position

Our final decision is to determine notified prices based on expected standing offer prices in south east Queensland. The delegation's cover letter[15] makes it clear that setting prices below expected standing offer prices in south east Queensland, as suggested by some stakeholders, would be inconsistent with the UTP.

In addition, market contracts generally have different terms and conditions to standard retail contracts, so their prices are not directly comparable. Like notified prices, standing offer prices in south east Queensland will apply to customers on standard retail contracts.

We have estimated the costs of supply for each retail tariff using an N+R cost build-up approach, where we treat the N (network cost) component as a pass-through, and determine the R (energy and retail cost) component.

2.2.2 Large business customers

As noted above, we have previously determined notified prices for large business customers based on the lowest cost of supplying customers in regional Queensland. This approach has the benefit of being more cost-reflective than an approach based on south east Queensland costs, which supports the development of competition among retailers for large business customers in the lower-cost areas of regional Queensland. It is also consistent with the requirement in the delegation to consider basing the network cost component on Ergon Distribution's network charges.

Ergon Distribution, Ergon Retail and Origin Energy supported this approach. Cotton Australia supported basing all notified prices on south east Queensland costs.

QCA position

Consistent with the requirements in the Minister's delegation, and with previous determinations, our final decision is to set notified prices for large business customers based on the lowest costs of supply in regional Queensland, which is Ergon Distribution's east pricing zone, transmission region one. We have estimated the costs of supply for each retail tariff using an N+R cost build-up approach. This is consistent with our approach to setting notified prices for residential and small business customers, as discussed above. We consider the effect of our decision on competition in Chapter 6.

[15] See Appendix A.

2.2.3 Metering services charges

While most customers who pay notified prices also pay metering services charges, under the Electricity Act these charges cannot be included in notified prices.[16] For this reason, all prices and figures quoted in this document exclude metering services charges.

Metering services charges for customers on notified prices can be found on Ergon Retail's website.[17]

[16] Since 2015–16, the Australian Energy Regulator (AER) has classified metering charges as alternative control services which are not included in network tariffs. Distributors recover these costs through ACS charges (or distribution non-network charges) that are calculated and levied separately to network tariffs. We consider that the reclassification of metering charges means that they now meet the definition of 'distribution non-network charges' in the Electricity Act. Distribution non-network charges cannot be included in notified prices (s. 90(3)(d) of the Electricity Act).

[17] https://www.ergon.com.au/retail/residential/tariffs-and-prices/changes-to-your-bill/what-is-the-metering-services-charge.

3 NETWORK COSTS

A retailer incurs network costs when electricity is supplied to its customers. These costs are associated with transporting electricity through the transmission and distribution networks and account for around 50 per cent of the final cost of electricity for small customers.

As regulated monopoly businesses, Powerlink, Energex and Ergon Distribution earn regulated revenues that are determined by the Australian Energy Regulator (AER). In addition to recovering their own distribution network costs, Energex and Ergon Distribution pass Powerlink's transmission network costs on to customers in network charges that are approved by the AER as well.

This chapter sets out our decisions on the network charges to be used as the basis of notified prices for 2016–17. In summary, we have decided to:

- *base the flat rate retail tariffs and controlled load retail tariffs for residential and small business customers on Energex's network tariff structures and prices (consistent with our previous determinations)*
- *base the time-of-use retail tariffs for residential and small business customers (tariffs 12A and 22A) on Ergon Distribution's network tariff structures and Energex's price levels (consistent with our 2015–16 determination)*
- *base the obsolete time-of-use retail tariff for small business customers (tariff 22) on Energex's network tariff structure and prices (consistent with our 2015–16 determination)*
- *base the seasonal time-of-use demand retail tariffs for residential and small business customers (tariffs 14 and 24) on Ergon Distribution's network tariff structures and Energex's price levels (consistent with our 2015–16 determination)*
- *base all retail tariffs for large business customers on Ergon Distribution's network tariff structures and prices (consistent with our previous determinations)*
- *retain retail tariffs 41, 47 and 48.*

3.1 Introduction

A retailer incurs network costs when electricity is supplied to its customers. Network costs are the costs associated with transporting electricity through transmission and distribution networks.

In the 'Network plus Retail' (N+R) cost build-up approach that we use to set notified prices, the network cost component is treated as a pass-through. To determine the network cost component to be passed through to retail customers, the QCA must decide:

(a) the level at which network charges should be set (Energex levels or Ergon Distribution levels)

(b) the network tariff structure on which the network cost component should be based.

Network tariff structures can include, for example, combinations of fixed charges, demand charges and usage charges.

3.2 Network tariffs for residential, small business and unmetered supply customers

This section discusses our approach to setting the network cost components of retail tariffs for residential, small business and unmetered supply customers (excluding street lighting customers—see Section 3.3).

For the 2016–17 determination, we are only setting notified prices for regional Queensland; in particular, the delegation requires that we consider:

- for residential and small business customer retail tariffs (except tariffs 12A, 14, 22A and 24), basing the network cost component on Energex network charges and tariff structures
- for residential and small business customer time-of-use retail tariffs (tariffs 12A and 22A) and time-of-use demand retail tariffs (tariffs 14 and 24), basing the network cost component on Energex network charges, but using the relevant Ergon Distribution network tariff structures.

Adopting the approach proposed in the delegation would be consistent with our approach in the 2015–16 determination. Under this approach, the network cost component of each retail tariff broadly reflects the costs of supplying customers in south east Queensland, but the network tariff structures used as the basis for setting those retail tariffs vary with the network cost components of:

- flat rate retail tariffs (retail tariffs with usage charges that do not vary with the time and/or level of consumption) based on Energex's network tariff structures
- time-of-use and time-of-use demand retail tariffs (retail tariffs with usage and other charge rates that vary with the time and/or level of consumption) based on Ergon Distribution's network tariff structures.

This section explains our decision to continue with this approach in our 2016–17 determination. We also explain our decision to continue to use Energex network tariff structures for the obsolete time-of-use retail tariff for small business customers (tariff 22) and to retain tariff 41.

3.2.1 Energex or Ergon Distribution network price levels

In determining the network cost components of regulated retail tariffs, the first issue we must consider is the level at which network charges should be set (Energex levels or Ergon Distribution levels).

As discussed in Section 2.2.1, our decision is to base notified prices for residential and small business customers on south east Queensland costs. Consistent with this decision, we will set network charges to reflect Energex cost levels. Setting network charges at Energex cost levels means that customers in regional Queensland will generally pay the same for network services as customers in south east Queensland.

3.2.2 Energex or Ergon Distribution network tariff structures

The second issue we must consider is whether to use the network tariff *structures* of Energex or Ergon Distribution.

There are some key differences between the Energex and Ergon Distribution network tariff structures, including:

- the proportion of costs recovered through fixed charges

- the approach to usage charge rates (e.g. flat usage rates versus three-part inclining block tariffs)
- the applicable time-of-use and demand charging periods (for example, different peak and off-peak periods)
- the methodology for calculating demand charges.

Further information on differences between the network tariff structures is provided in Appendix D.

The delegation directs us to consider using Energex network tariff structures for the residential and small business flat rate retail tariffs and controlled load tariffs, and Ergon Distribution network tariff structures for the residential and small business time-of-use retail tariffs (tariffs 12A and 22A) and time-of-use demand retail tariffs (tariffs 14 and 24).

Consistent with our approach in the 2015–16 determination and with the delegation, we have decided to continue to use a mix of Energex and Ergon Distribution network tariff structures as the basis for setting retail tariffs. Ergon Retail, Toowoomba Regional Council, CCIQ, and the Queensland Consumers' Association supported this approach.

We consider that using Ergon Distribution's network tariff structures for the time-of-use and time-of-use demand retail tariffs (excluding tariff 22, which is an obsolete tariff) would be more cost-reflective than using Energex's network tariff structures. We also consider that it is more important that time-of-use and time-of-use demand retail tariffs reflect Ergon Distribution's network tariffs structures, rather than flat rate retail tariffs, as the first-mentioned tariffs send signals to customers about the costs to retailers that arise due to the time or level of electricity consumption. As pointed out by the Queensland Productivity Commission (QPC), time-of-use and time-of-use demand tariffs are more efficient than single rate and inclining block tariffs.[18] The delegation also points out that using Ergon Distribution's network tariff structures for time-of-use and time-of-use demand retail tariffs would encourage customers to reduce consumption during peak periods on Ergon Distribution's network.

Ergon Distribution and Origin were both of the view that we should base all residential and small business customer retail tariffs on Ergon Distribution's network tariff structures, on the basis that it would be a further step towards improving cost-reflectivity. However, this would result in a change of network tariff structure for residential and small business flat rate retail tariffs, and controlled load tariffs, as these tariffs were based on Energex's network tariff structures in the 2015–16 determination. This change would have significant distributional impacts on the customers who are on these tariffs, with lower-usage customers in particular likely to face substantially higher bills.[19] QCOSS did not support using Ergon Distribution's network tariff structure for the main residential flat rate retail tariff (tariff 11), as it considered that the change in the network tariff structure would create confusion and impact adversely on smaller-usage customers.

We also note that Ergon Distribution has acknowledged that its inclining block network tariffs will, over time, need to be phased out in favour of network tariffs that better satisfy the pricing principles in the National Electricity Rules (NER).[20] This suggests that there may be some uncertainty about the future of these network tariff structures. We consider it would be

[18] Queensland Productivity Commission, *Electricity Pricing Inquiry*, draft report, February 2016, pp. 76–79.
[19] See Appendix D for more information on the customer impacts.
[20] Ergon Distribution, *Tariff Structure Statement 2017–18 to 2019–20*, November 2015, p. 36.

preferable to have more certainty about future network tariff structures before making major changes that would affect nearly all regional customers.

For the reasons above, we do not agree with the suggestion that we should adopt Ergon Distribution's network tariff structures for the flat rate retail tariffs and controlled load tariffs.

Tariff 22

Tariff 22 is an obsolete tariff that is based on an Energex network tariff structure. Consistent with our 2015–16 determination, we will continue to make this tariff available to customers until 30 June 2017, when it will be replaced by tariff 22A (which is based on the Ergon Distribution network tariff structure).[21] Tariff 22 will also continue to be closed to new regional customers.

Customers may move to tariff 22A (or another retail tariff that suits their needs) earlier than 30 June 2017 if they choose.[22]

QCA position

Consistent with our draft decision, our final decision is to use:

- Energex's network tariff structures as the basis for setting the network cost components of flat rate retail tariffs, tariff 22 and controlled load tariffs
- Ergon Distribution's network tariff structures as the basis for setting the network cost components of time-of-use and time-of-use demand retail tariffs.

3.2.3 Adjusting Ergon Distribution network tariff structures to Energex price levels

As discussed, we have decided to use Ergon Distribution's tariff structures as the basis for setting time-of-use and time-of-use demand retail tariffs for residential and small business customers (excluding tariff 22), while reducing the overall level of prices to Energex levels.

To adjust these network tariff structures to Energex price levels, we have decided to use the same adjustment process as in our 2015–16 determination. This process involves adjusting:

- the residential time-of-use retail tariff (tariff 12A) by adopting the Ergon Distribution usage charges and reducing the Ergon Distribution fixed charge towards Energex's price level (as far as possible)
- the small business time-of-use retail tariff (tariff 22A) by adopting the Energex fixed charge and reducing the Ergon Distribution usage charges
- the residential and small business time-of-use demand retail tariffs (tariffs 14 and 24) by uniformly decreasing the Ergon Distribution fixed and usage charges.

We have adopted different adjustment approaches for the four tariffs to prevent our adjustments resulting in adjusted network prices being set higher than the levels that may be approved by the AER.

The only difference from our approach in 2015–16 is in the mechanics of adjusting the Ergon Distribution network charges to align with Energex price levels. These changes are required due to changes in data availability and reliability.

[21] In our 2015–16 determination, we decided to make tariff 22 available to customers until 30 June 2017 to mitigate customer impacts and address metering issues.

[22] This is subject to customers having appropriate metering in place and meeting the terms and conditions of their chosen retail tariff.

Appendix D provides more information on the adjustment approach.

QCA position

Consistent with our draft decision, our final decision is to adjust:

- the residential time-of-use retail tariff (tariff 12A) by adopting the Ergon Distribution usage charges and reducing the Ergon Distribution fixed charge towards Energex's price level (as far as possible)
- the small business time-of-use retail tariff (tariff 22A) by adopting the Energex fixed charge and reducing the Ergon Distribution usage charges
- the residential and small business time-of-use demand retail tariffs (tariffs 14 and 24) by uniformly decreasing the Ergon Distribution fixed and usage charges.

3.2.4 New controlled load tariff

In the interim consultation paper, we noted that Ergon Distribution was proposing to introduce a new controlled load tariff from 1 July 2016. If approved, this tariff would only have been available in conjunction with the residential time-of-use demand tariff. Ergon Distribution has subsequently advised that this tariff will not be introduced in 2016–17. Therefore, we have not created a new retail controlled load tariff.

3.2.5 Removal of tariff 41

In the interim consultation paper, we indicated that we were considering removing tariff 41 on the basis that Ergon Distribution does not have an equivalent network tariff available for small business customers with this structure, and fewer than 300 customers are on this tariff.[23] Tariff 41 is a low voltage demand tariff that has fixed, usage and demand charges and is based on an Energex network tariff. While Energex designates this network tariff as a large business customer network tariff, it is made available to small business customers on a voluntary basis.

Ergon Retail advised that its customers on this tariff would need to transition to other tariffs, and considered that the tariff should be closed to new customers and phased out by 30 June 2017.

QCA position

Given that our approach is to use Energex tariff structures for flat rate tariffs and that the Energex tariff is available to small business customers in south east Queensland, our decision is to retain tariff 41.

3.2.6 Network tariffs and charges for 2016–17

Our final decision is to base regulated retail tariffs for residential, small business and unmetered supply customers on:

- Energex network tariffs and charges for tariffs 11, 20, 31, 33, 41 and 91
- Energex network tariffs and charges for obsolete tariff 22, which will be available until 30 June 2017
- calculated network tariffs and charges for retail tariffs 12A and 22A, which are based on Ergon Distribution's seasonal time-of-use network tariffs. To maintain the uniform tariff policy

[23] Based on data from Ergon Retail.

(UTP), the level of charges has been reduced to a level where regional customers will, on average, pay the same as they would pay on tariffs 11 and 20

- calculated network tariffs and charges for retail tariffs 14 and 24, which are based on Ergon Distribution's seasonal time-of-use demand network tariffs. As with tariffs 12A and 22A, the level of charges has been reduced to a level where regional customers will on average pay the same as they would pay on tariffs 11 and 20 in south east Queensland.

Our final decision on the network charges to apply to each retail tariff is presented in the following tables. It should be noted that these tables are based on the draft network tariffs that Ergon Distribution and Energex have provided to the AER. In the event that the final network tariffs approved by the AER differ from those submitted by distributors, the QCA will consider utilising a cost pass-through mechanism.

Table 2 Energex network charges for 2016–17 for retail tariffs 11, 20, 22 (obsolete), 31, 33, 41 and 91 (GST exclusive)

Retail tariff	*Energex network tariff code*	*Fixed charge[a] c/day*	*Usage charge (peak) c/kWh*	*Usage charge (flat or off-peak) c/kWh*	*Demand charge $/kW/month*
Tariff 11—Residential (flat rate)	8400	50.200		11.624	
Tariff 20—Business (flat rate)	8500	72.000		12.486	
Tariff 22—Business (time-of-use, transitional)	8800	72.000	14.395	9.683	
Tariff 31—Night rate (super economy)	9000			6.421	
Tariff 33—Controlled supply (economy)	9100			9.686	
Tariff 41—Low voltage (demand, obsolete)[b]	8300	532.100		2.056	24.351
Tariff 91— Unmetered	9600			10.298	

a *Charged per metering point.*

b *The kVA equivalent demand charge for tariff 41 is $21.860/kVA/month. A conversion factor of 0.8977 has been used, as advised by Energex.*

Table 3 Calculated network charges for 2016–17 for retail tariffs 12A, 14, 22A and 24 (GST exclusive)

Retail tariff	*Fixed charge[a] c/day*	*Usage charge (peak) c/kWh*	*Usage charge (flat or off-peak) c/kWh*	*Demand charge (peak) $/kW/month*	*Demand charge (off-peak) $/kW/month*
Tariff 12A—Residential (time-of-use)	61.375	38.375	7.558		
Tariff 22A—Business (time-of-use)	72.000	30.462	10.236		
Tariff 14—Residential (time-of-use demand)	22.525		3.386	52.885	9.636
Tariff 24—Business (time-of-use demand)	24.540		4.322	71.601	11.765

a *Charged per metering point.*

3.3 Network tariffs for large business and street lighting customers

For the 2015–16 determination, we based retail tariffs for large business customers and street lighting customers on the network tariffs and charges applying to Ergon Distribution's east pricing zone, transmission region one. We have decided to continue with this approach for 2016–17, because it is consistent with our decision, discussed in Section 2.2.2, to set notified prices for large business customers based on the lowest costs of supply in regional Queensland.

Submissions from Toowoomba Regional Council, Ergon Distribution and Ergon Retail supported maintaining this approach for 2016–17. While Origin expressed similar support, it considered that there was merit in transitioning large business prices to more cost-reflective levels to satisfy the NER pricing principles. Cotton Australia did not support maintaining this approach and considered that notified prices should be based on south east Queensland costs.

3.3.1 Tariffs 47 and 48

In its submission on the interim consultation paper, Ergon Distribution requested that we consider amending the eligibility requirements for tariff 47 so that it is not available to new customers from 1 July 2016. Ergon Distribution also proposed that we use different network tariff(s) as the basis for tariff 48. Ergon Distribution proposed these changes because it intends to phase out its Standard Access Customer (SAC) Large Demand High Voltage network tariff, which underpins tariffs 47 and 48, in 2017–18.

As these changes were not canvassed in the interim consultation paper, our decision is to leave the eligibility requirements for tariff 47 unchanged and to continue to base tariff 48 on the SAC Large Demand High Voltage network tariff. We consider that any changes to tariff 48 in particular should be the subject of more extensive consultation, given the potentially significant adverse impacts on some customers.

We also note that the QPC, in its *Electricity Pricing Inquiry* draft report, considered that there was not a strong case for allowing very large customers to continue to have access to notified prices.[24]

3.3.2 Network tariffs and charges for 2016–17

Our final decision is to continue to base retail tariffs for large business customers and street lighting customers on the network tariffs and charges applying to Ergon Distribution's east pricing zone, transmission region one.

Our final decision on the network charges to apply to each retail tariff is presented in Table 4. It should be noted that these tables are based on the draft network tariffs that Ergon Distribution and Energex have provided to the AER. In the event that the final network tariffs approved by the AER differ from those submitted by distributors, the QCA will consider utilising a cost pass-through mechanism.

[24] Queensland Productivity Commission, *Electricity Pricing Inquiry*, draft report, 3 February 2016, p. 169.

Table 4 Ergon Distribution network charges for 2016–17 large business and street lighting customer retail tariffs (GST exclusive)

Retail tariff	*Ergon Distribution network tariff code[c]*	*Fixed charge[a] c/day*	*Usage charge (peak) c/kWh*	*Usage charge (flat or off-peak) c/kWh*	*Demand charge (peak) $/kW/month*	*Demand charge (flat/off-peak) $/kW/month*
Tariff 44—over 100 MWh small (demand)	EDSTT1	4568.700		2.201		35.801
Tariff 45—over 100 MWh medium (demand)	EDMTT1	14751.500		2.283		28.422
Tariff 46—over 100 MWh large (demand)	EDLTT1	39607.000		2.467		25.257
Tariff 47—high voltage (demand)	EDHTT1	37183.400		2.078		23.257
Tariff 48—over 4 GWh high voltage (demand)	EDHTT1	37183.400		2.078		23.257
Tariff 50—seasonal time-of-use (demand)	ESTOUDCT1	3822.400	1.779	4.863	54.966	13.257
Tariff 71—street lighting[b]	EVUT1	0.700		19.445		

a *Charged per metering point.*

b *The fixed charge for street lighting applies to each lamp.*

c *Some Ergon Distribution network tariff codes have a 'base', 'C' or 'X' variant. The base code applies the relevant Alternative Control Service (ACS) regulated metering capital and non-capital charges; the 'X' code applies the relevant ACS regulated metering capital charge; and the 'C' code does not apply any ACS regulated metering charges.*

4 ENERGY COSTS

A retailer incurs energy costs when purchasing electricity to meet the electricity demand of its customers. Energy costs can be split into three general categories:

(1) wholesale energy costs

(2) other energy costs

(a) Renewable Energy Target (RET) costs

(b) National Electricity Market (NEM) participation fees and ancillary services charges

(c) prudential capital costs

(3) energy losses.

As with previous determinations, we have determined energy costs based on advice from our consultant, ACIL. ACIL has estimated that overall energy costs will increase for all customers in 2016–17, with increases driven primarily by increased wholesale energy costs and Large-scale Renewable Energy Target (LRET) costs.

An overview of how each energy cost component was calculated is provided below. A more detailed explanation appears in ACIL's report, which is available on our website.[25]

4.1 Wholesale energy costs

Retailers incur wholesale energy costs when purchasing electricity from the National Electricity Market (NEM) to meet the electricity demand of their customers. The NEM is a volatile market where prices are settled every half hour and can range from –$1000 per MWh to $14,000 per MWh.[26] Retailers use the following strategies to reduce price volatility risk:

- pursuing a 'hedging strategy' by purchasing financial derivatives like swaps and options
- entering long-term power purchase agreements with generators
- investing in their own electricity generators.

In 2015–16, ACIL estimated wholesale energy costs using a hedging strategy approach. We considered that ACIL's approach was transparent and best reflected the costs retailers incur when purchasing electricity from the NEM. Hedging strategy approaches have been endorsed by the Australian Energy Market Commission (AEMC) as best practice[27] and have been adopted by other Australian regulators.

Ergon Retail and QCOSS supported ACIL's hedging strategy approach. Origin Energy raised some technical concerns with regard to ACIL's approach to estimating contract prices and generating load profiles. Canegrowers argued that the QCA should base the wholesale energy cost calculation on the Ergon load profile for all tariffs.

25 http://www.qca.org.au/Electricity/Regional-consumers/Reg-Electricity-Prices.

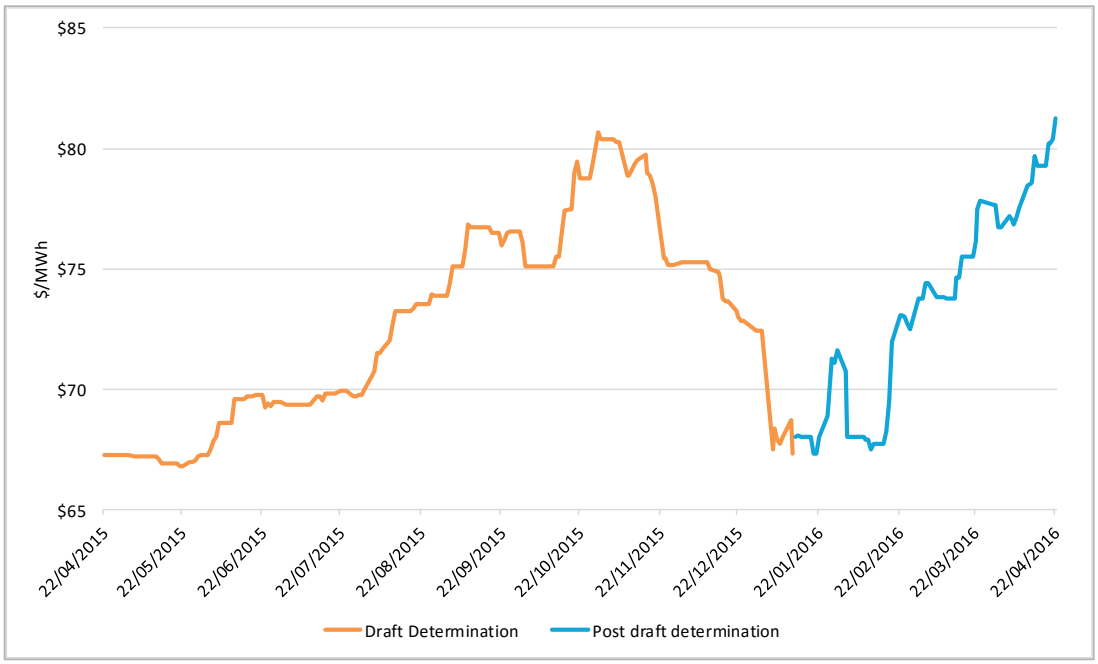
[26] Minimum spot price is defined in clause 3.9.6(b) of the National Electricity Rules. The Market Price Cap is published by the AEMC every February (http://www.aemc.gov.au/News-Center/What-s-New/Announcements/AEMC-publishes-the-Schedule-of-Reliability-Set-(4)).

[27] AEMC, *Final Report, Advice on best practice retail price methodology*, 27 September 2013.

Consistent with previous years, ACIL estimated wholesale energy costs using a hedging strategy approach. ACIL has provided a detailed explanation of its calculation of wholesale energy costs in chapter 4 of its report, and addressed issues raised in submissions related to its calculations in chapter 3 of that report.

ACIL estimated that wholesale energy costs will increase for all retail tariffs. The overall increase in prices has been driven by an increase in electricity demand from Queensland-based liquefied natural gas (LNG) projects. The increased activity in LNG production has also resulted in higher fuel costs for gas-fired generators. ACIL found that the increase in contracted gas prices has more than doubled the cost of gas-fired generation compared to the beginning of 2015–16.[28] Electricity futures contract prices, which are used in retailer hedging strategies, have increased since the draft determination, as can be seen in Figure 4 below.

Figure 4 Queensland base futures contract prices

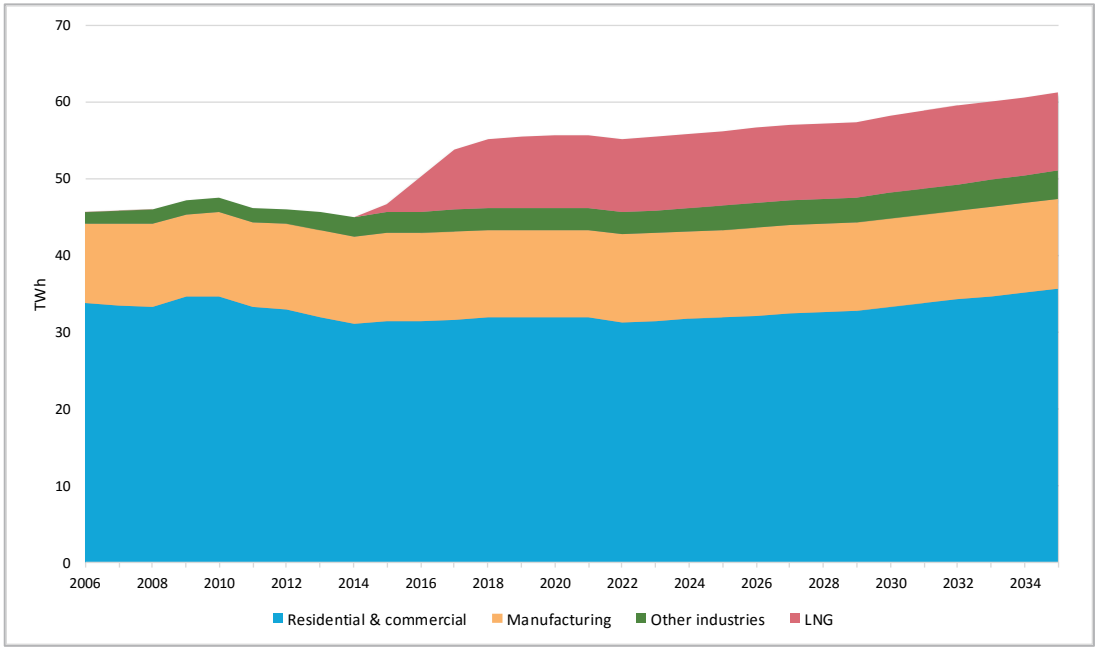


Source: ASX energy data.

The latest electricity forecasts from the Australian Energy Market Operator (AEMO) show electricity demand from LNG production increasing in the short term, and remaining high for the remainder of the forecast period (see Figure 5 below).

[28] ACIL, *Estimated Energy Costs 2016–17 Retail Tariffs*, 17 May 2016, p. 6.

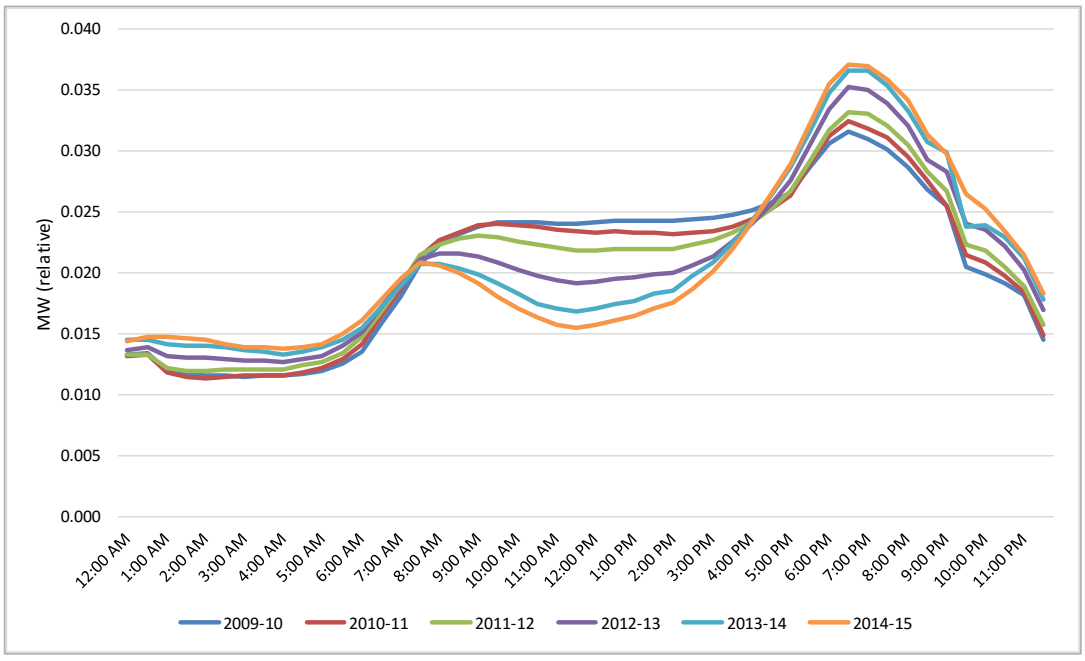
Figure 5 Historical and forecast Queensland annual electricity demand by sector



Source: Australian Energy Market Operator, National Electricity and Gas Forecasting (medium scenario).[29]

In addition to increases in demand and fuel costs, ACIL found that increased solar generation is continuing to reduce daytime demand but has no effect on peak demand[30], which is resulting in the net system load profile (NSLP) becoming peakier and more expensive to hedge. Figure 6 below shows how the NSLP has become peakier over time.

Figure 6 Energex net system load profile



Note: The term 'relative MW' means the loads for each tariff have been scaled so that they sum to one. This removes differences in absolute scale between years, and preserves the relative shape of the profile.

Source: ACIL analysis.

[29] Data available at http://forecasting.aemo.com.au/.

[30] Peak demand generally occurs between 6:30 pm and 8:30 pm.

As a result, ACIL estimated:

- Wholesale energy costs for the Ergon Energy NSLP will increase by $9.99 per MWh compared to 2015–16, which is slightly less than the increase in the Energex NSLP ($11.59 per MWh). The outcomes are slightly different because the load profile of the Ergon Energy NSLP is less peaky than the Energex NSLP.
- Wholesale energy costs for controlled load tariffs will also increase. Tariff 31 will increase by $6.21 per MWh compared to 2015–16, while tariff 33 will increase by $5.76 per MWh. The difference in outcomes is due to the load profile for tariff 33 becoming flatter compared to previous years, resulting in a smaller increase.

QCA position

We consider that ACIL's methodology adequately takes into account the issues raised in submissions and is likely to produce the most reliable estimates of the efficient costs of supply. Retaining the same approach for 2016–17 will also provide certainty to stakeholders.

We accept ACIL's advice on this matter and its wholesale energy cost estimates, which are provided in Table 5. Consistent with the UTP[31], the QCA will apply the Energex NSLP cost estimate for residential, small business and unmetered tariffs.

Table 5 Estimated wholesale energy costs at the Queensland regional reference node for 2016–17

Settlement class	*Retail tariff*	*$/MWh*	*% change from 2015–16*
Energex NSLP and unmetered supply	11, 12A, 14, 20, 22, 22A, 24, 41, 91	$75.32	18.2%
Energex Controlled Load 9000	31	$42.31	17.2%
Energex Controlled Load 9100	33	$56.15	11.4%
Ergon Energy NSLP and streetlights	44, 45, 46, 47, 48, 50, 71	$65.69	17.9%

Source: ACIL, Estimated Energy Costs for 2016–17, 17 May 2016, p. 22.

4.2 Other energy costs

In addition to wholesale energy costs, we must account for other energy costs that retailers incur when purchasing electricity from the NEM, which are:

- Renewable Energy Target (RET) costs
- NEM participation fees and ancillary services charges
- prudential capital costs.

4.2.1 Renewable Energy Target costs

The RET scheme, comprised of the Large-scale Renewable Energy Target (LRET) and Small-scale Renewable Energy Scheme (SRES), provides incentives for the electricity sector to increase generation from renewable sources and reduce greenhouse gas emissions. The costs of these

[31] See section 2.2.1 for further details.

incentives are paid by retailers who are required to purchase large-scale generation certificates (LGCs) and small-scale technology certificates (STCs).

LRET costs

The LRET sets annual targets for the amount of electricity that must be sourced from large-scale renewable energy projects like wind farms, with an ultimate target of generating 33,000 GWh of electricity from large-scale renewable sources in 2020.[32] Retailers must purchase a set number of LGCs according to the amount of electricity they have sold to customers in the calendar year.

For the 2015–16 final determination, ACIL estimated LRET costs using a market-based approach. This approach based LGC prices on forward prices for certificates published by the Australian Financial Markets Association (AFMA). ACIL used the 2015 renewable power percentage (RPP) for the first half of the pricing period, and the latest published 2016 LRET target for the second half of the pricing period.

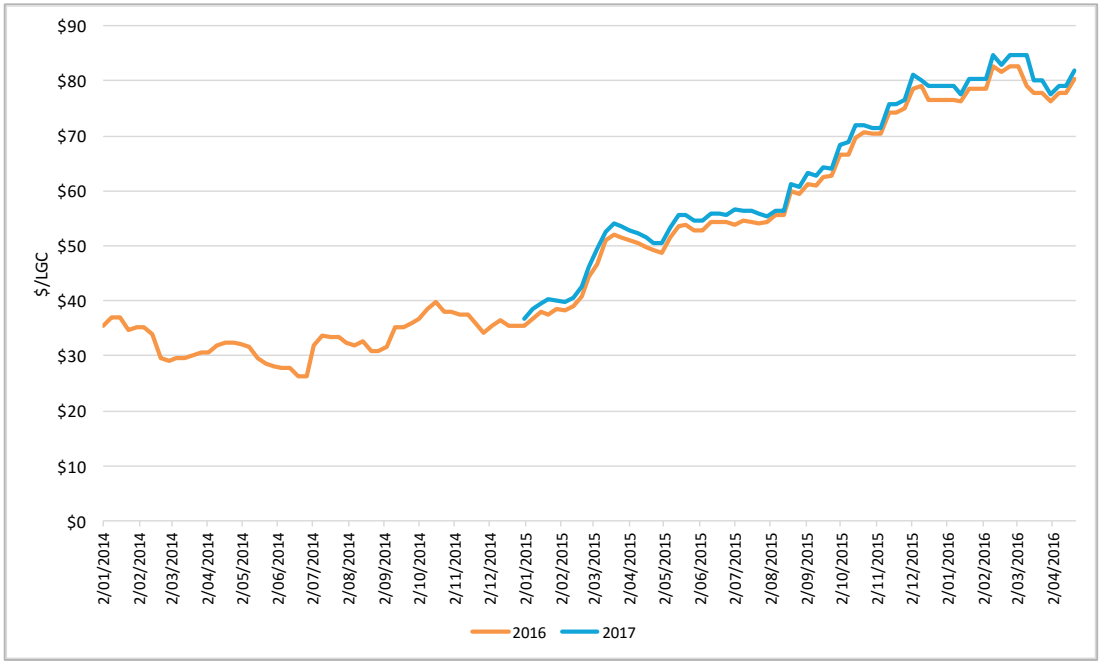
Ergon Retail supported calculating LRET costs using a market-based approach. However, it highlighted that the 2014 RET review had suppressed LRET prices during the review period and considered that ACIL's approach, whereby retailers purchase LGCs over a two-year period, did not reflect retailer behaviour during the review period. Canegrowers considered that the LRET allowance should be reduced to reflect the efficient costs of producing large-scale renewable energy.

ACIL forecast LRET costs using an approach consistent with previous years. A detailed explanation of its calculations is provided in chapter 4 of its report prepared for the QCA, along with information on LGC prices and assumptions underpinning the implied RPPs used. Chapter 3 of ACIL's report addresses issues raised in submissions. ACIL examined market prices over a number of years and considers that its market-based approach, whereby retailers purchase LGCs over a two-year period to satisfy their obligations, provides the best estimate of LRET costs for the purposes of setting notified prices for 2016–17.

ACIL's report shows that there has been a significant increase in forward LGC prices since the revised 33,000 GWh LRET target was implemented in June 2015 (see Figure 7 below). ACIL explained that this is due to a hiatus in new renewable energy project construction. As a result, ACIL forecast that LRET costs for 2016–17 will be $7.83 per MWh for all retail tariffs, an increase of $3.45 per MWh compared to 2015–16.

[32] Section 40, *Renewable Energy (Electricity) Act 2000*.

Figure 7 Large-scale Generation Certificate (LGC) prices



Source: AFMA and ACIL analysis.

QCA position

We remain of the view that ACIL's market-based approach, using the most up-to-date targets and price information published by AFMA, is likely to produce the most reliable estimate of LRET costs to be incurred by retailers in 2016–17. Retaining a consistent approach for 2016–17 will also provide certainty to stakeholders.

We accept ACIL's advice on this matter and its LRET cost estimates, which are outlined in Table 6.

SRES costs

The SRES provides an incentive for individuals and small businesses to install eligible small-scale renewable energy systems such as solar panel systems, small-scale wind systems, small-scale hydro systems, solar hot water systems and heat pumps. Customers installing these systems receive STCs, which retailers must purchase according to the amount of electricity they have sold to those customers.

For the 2015–16 determination, ACIL estimated SRES costs using the final 2015 small-scale technology percentage (STP) target for the first half of the pricing period and the latest available non-binding 2016 STP target for the second half of the pricing period. STC prices were based on the clearing house price.

ACIL estimated SRES costs using the same approach as 2015–16. It forecast a decrease in SRES costs of $0.60 per MWh compared to 2015–16. This estimate is based on the final 2016 STP target and the latest available non-binding STP target for 2017.[33]

[33] The final STP for 2016 is lower the non-binding STP used in the 2015–16 final determination. We consider this difference as part of our cost pass-through mechanism discussed in section 6.2.

QCA position

We remain of the view that ACIL's approach is likely to produce the most reliable estimate of SRES costs to be incurred by retailers in 2016–17. Retaining a consistent approach for 2016–17 will also provide certainty to stakeholders.

We accept ACIL's advice on this matter and its SRES cost estimates, which are outlined in Table 6.

4.2.2 NEM participation fees and ancillary services charges

NEM participation fees are levied on retailers by the AEMO to cover the costs of operating the NEM and funding Energy Consumers Australia. Ancillary services charges cover the costs of the services used by AEMO to manage power system safety, security and reliability.

As with the 2015–16 determination, ACIL used AEMO budget and fee projections to estimate NEM participation fees for 2016–17. Its ancillary services charges were based on the average historical costs observed over the preceding 52 weeks.

QCA position

We remain of the view that ACIL's approach is likely to produce the most reliable estimate of NEM participation and ancillary services costs to be incurred by retailers in 2016–17. Retaining a consistent approach for 2016–17 will also provide certainty to stakeholders.

We accept ACIL's advice on this matter and its cost estimates, which are outlined in Table 6.

4.2.3 Prudential capital costs

Prudential capital costs are the costs a retailer incurs to provide financial guarantees to AEMO and to lodge initial margins with hedge providers for futures contracts. These costs must be accounted for, as futures contracts are relied upon to derive wholesale energy cost estimates.

In the 2015–16 determination, prudential capital costs were considered as part of retail operating costs, as they were implicitly included in the retail operating cost benchmark we used. However, as discussed in section 2.3.3 of ACIL's report on retail costs, these costs vary according to the amount of electricity being purchased by the retailer, as well as the level of volatility in the electricity market. As such, ACIL considered they should be included in the energy cost allowance. To avoid double counting, prudential costs have been excluded from the retail cost allowance. QCOSS supported the QCA's approach to account for prudential capital costs as part of the energy cost allowance, provided these costs were separated out from retail operating costs. Canegrowers supported the methodology for estimating prudential operating costs but argued they should be based on costs for the Ergon NSLP.

As with the 2014–15 determination, ACIL calculated prudential capital costs for 2016–17 in line with the latest published AEMO requirements and margin requirements for trading in the futures market.

QCA position

We remain of the view that ACIL's approach is likely to produce the most reliable estimate of prudential capital costs to be incurred by retailers in 2016–17.

ACIL considered the issues raised by stakeholders. As discussed in section 2.3.3 of ACIL's report on retail costs, prudential costs were not included within the retail cost allowance, so they were not double counted. However, ACIL calculated prudential costs based on the Energex NSLP. We

consider this appropriate, as under the Government's UTP[34] most regional customers will pay notified prices based on energy costs in south east Queensland.

We accept ACIL's advice on this matter and its prudential capital cost estimates, which are outlined in Table 6.

4.2.4 Summary of other energy costs for 2016–17

Table 6 sets out other energy costs for 2016–17, which will be added to the wholesale energy cost components for all retail tariffs.

Table 6 Other energy costs (excluding losses)—all retail tariffs

Cost component	*$/MWh*	*% change from 2015–16*
LRET	$7.83	78.8%
SRES	$3.74	-13.8%
NEM fees	$0.48	2.1%
Ancillary services	$0.33	-8.3%
Prudential capital	$0.99	na[a]
Total	$13.37	40.0%[b]

a *Prudential capital costs were considered as part of the retail operating cost allowance in 2015–16.*

b *As other energy costs in 2016–17 includes an additional allowance for prudential capital costs, the percentage change between 2015–16 and 2016–17 is greater than the sum of changes in each individual component of other energy costs.*

Note: Totals may not add due to rounding.

Source: ACIL, Estimated Energy Costs for 2016–17, 17 May 2016, p. 26-29.

4.3 Energy losses

Some electricity is lost when it is transported across transmission and distribution networks. As a result, retailers must purchase sufficient electricity to supply their customers' load and allow for losses. As with previous determinations, ACIL has accounted for these losses by applying transmission and distribution loss factors published by AEMO in a manner that aligns with AEMO's settlement process.

QCA position

We are satisfied with ACIL's approach and accept its loss factor calculations, which are outlined in Table 7. These losses are based on AEMO's 2016–17 published loss factors.

4.4 Total energy cost allowances for 2016–17

Table 7 summarises energy cost allowances for each retail tariff for 2016–17.

[34] See section 2.2.1 for further details.

Table 7 Total energy cost allowances for 2016–17

Settlement class	*Retail tariff*	*Wholesale energy*	*Other energy*[a]	*Energy losses*	*Total energy allowance*		*Change from 2015–16*[b]
		$/MWh	$/MWh	%	$/MWh	c/kWh	%
Energex NSLP and unmetered supply	11, 12A, 14, 20, 22, 22A, 24, 41, 91	$75.32	$13.37	6.5%	$94.45	9.445	21.0%
Energex Controlled Load 9000	31	$42.31	$13.37	6.5%	$59.30	5.930	22.0%
Energex Controlled Load 9100	33	$56.15	$13.37	6.5%	$74.04	7.404	16.0%
Ergon Energy NSLP—small, medium and large demand and streetlights	44, 45, 46, 50, 71	$65.69	$13.37	12.0%	$88.55	8.855	20.9%
Ergon Energy NSLP—high voltage demand and customers over 4 GWh	47, 48	$65.69	$13.37	5.2%	$83.17	8.317	19.6%

a *Other energy costs include an allowance for prudential capital costs. Prudential costs were considered as part of the retail operating cost allowance in 2015–16.*

b *As other energy costs in 2016–17 include an additional allowance for prudential capital costs, the percentage change between 2015–16 and 2016–17 is greater than the sum of changes in each individual component of energy costs.*

Note: Totals may not add due to rounding.

Source: ACIL, Estimated Energy Costs for 2016–17, 17 May 2016, p. 31.

5 RETAIL COSTS

The second element in the N+R approach, the retail costs component (R), includes retail operating costs and a retail margin.

In previous decisions, we benchmarked other regulatory decisions to set retail operating costs and margins. However, we consider it may no longer be appropriate to continue with this approach, given that many comparable jurisdictions (including NSW and South Australia) have removed retail price regulation in recent years. We consider it is timely to review these cost components and have engaged ACIL to undertake a comprehensive review of retail costs based on market observations and confidential data supplied by electricity retailers.

In summary, we have decided to:

- *adopt separate retail cost allowances for residential, small business, large business and very large business customer tariffs*
- *estimate total retail cost allowances for residential and small business customer tariffs based on benchmarking observations, applied as fixed and variable components*
- *for large and very large business customer tariffs, maintain the 2015–16 retail cost allowances in real terms.*

5.1 Overview

Retail costs include retail operating costs (ROC) and a retail margin.

ROC are the costs associated with services provided by a retailer to its customers, which typically include customer administration, call centres, corporate overheads, billing and revenue collection, IT systems, regulatory compliance, and customer acquisition and retention costs (CARC).

The retail margin represents the return to investors for retailers' exposure to systematic risks associated with providing retail electricity services. The margin can also include other costs incurred by retailers, such as depreciation, amortisation, interest payments and tax expenses.

In previous determinations, we estimated allowances for ROC based on publicly reported data and benchmark observations of other regulatory decisions, predominantly those of IPART. For the retail margin, we applied an allowance of 5.7 per cent of total costs, which was based on the retail margin adopted by IPART in its 2013–16 decision on regulated retail electricity prices in NSW.[35]

Notwithstanding retailers' preference to maintain our previous approach, we consider it is no longer preferable to rely on benchmarking of other regulators' decisions to estimate retail costs, given that many comparable jurisdictions (including NSW and South Australia) have removed retail price regulation in recent years. Reliance on other regulatory decisions also generates circularity, which will lead to regulatory error over time. For these reasons, we have conducted a comprehensive review of this cost component for 2016–17.

[35] IPART, *Review of regulated retail prices and charges for electricity from 1 July 2013 to 30 June 2016*, June 2013, chapters 7 and 8.

We engaged ACIL to provide advice on efficient retail costs for our 2016–17 determination. As a first step, ACIL prepared a methodology paper outlining its proposed approach, which we released along with our interim consultation paper in December 2015. ACIL also produced a preliminary report, released with our draft determination in March 2016, and a final report in May 2016, released with this final determination.

Submissions

Consumer groups (QCOSS and the Queensland Consumers Association) supported a comprehensive review of retail operating costs and margins. QCOSS noted:

> *It is timely to undertake a more thorough assessment of these costs as the QCA had previously used a 2013 IPART estimate as the benchmark. The Victorian market has been deregulated since 2009 and prices in NSW and South Australia have been deregulated more recently. Tariffs and retailers' cost structures will have changed since 2013 as retail markets become more mature.*[36]

In contrast, Origin Energy considered the QCA's existing approach to estimating retail costs was sufficient, if augmented by benchmarking against actual retailer data:

> *Origin's preferred approach to determine a representative retailer's costs is to use the current Queensland retail operating cost benchmark and to escalate this allowance on an annual basis. To give the QCA confidence in its own benchmark, Origin believes the QCA can construct an indicative retail operating cost for a representative retailer based on indicative data provided by retailers.*[37]

Ergon Retail also preferred to largely retain the existing approach:

> *EEQ supports the continuation of the benchmarking approach employed in 2015–16. As ACIL Allen has clearly stated the intention to use both a benchmarking and bottom-up approach, EEQ requests the QCA give consideration to the continuing evolution of the regulatory and market environment. This should include recognition of the characteristics of the retail electricity supply to regional Queensland when setting prices for 2016–17 and subsequent periods.*[38]

Both Origin and Ergon Retail acknowledged the problems in relying solely on bottom-up retailer data due to different cost allocation approaches and cost categorisation. Origin noted:

> *Origin believes that relying on data provided by retailers to determine an appropriate retailer operating cost is problematic as retailers have different accounting methodologies and how they allocate costs to electricity and gas customers [sic].*
>
> *…*
>
> *We thus believe a benchmarking approach with some comparison to actual costs to assure validity is the most effective mechanism to determine these costs.*[39]

Similarly, Ergon Retail submitted:

> *EEQ generally supports ACIL Allen's approach to estimating retail margin. EEQ does however acknowledge, and agree with the concerns raised by other market participants, that a bottom-up approach may have some practical barriers to being an effective method of estimating ROC and margin. EEQ is also concerned that relying too heavily on a bottom-up methodology for estimating*

[36] QCOSS, submission to the QCA interim consultation paper, Regulated retail electricity prices 2016–17 p. 4.
[37] Origin Energy, submission to the QCA interim consultation paper, *Regulated retail electricity prices 2016–17*, 29 January 2016, p. 3.
[38] Ergon Energy Queensland, submission to the QCA interim consultation paper, *Regulated retail electricity prices 2016–17*, 20 January 2016, p. 7.
[39] Origin Energy, submission to the QCA interim consultation paper, *Regulated retail electricity prices 2016–17*, 29 January 2016, p. 3.

> *ROC may distort the estimation of efficient costs. This is true for ROC allowances for both small and large customers.*[40]

With regard to the retail margin component of retail costs, Origin supported a retail margin based on a percentage of total costs as previously adopted. Origin considered a margin of at least 5.7 per cent is appropriate.[41]

The Queensland Consumers Association questioned how the cost of capital would be calculated and included in any estimates of retail costs and margin. We note that, while this was a component of IPART's assessment of the retail margin, ACIL's benchmarking approach for 2016–17 does not hinge on estimates of the cost of capital.[42]

In response to the draft determination, COTA Queensland supported the new approach to retail costs. In contrast, CCIQ considered that the QCA should return to the previous approach to estimating retail costs.

QCOSS and the Queensland Consumer's Association suggested that the benchmark retail cost values should be derived based on the weighted average of retail costs, weighted toward the most prominent retailers, by market share. We have considered this proposal and addressed this matter in section 5.4.2.

The Minister lodged a submission raising concerns about price impacts on small business customers. The Minister requested that the QCA consider a transitional arrangement for the updated retail cost estimates for small business customers on the basis that the estimates represent a step change and will:

> *…result in a significant price increase at a time when they [small business customers] could reasonably have expected a more stable outcome.*[43]

This issue is addressed in section 5.6.

Some stakeholders raised specific methodology-related issues regarding ACIL's analysis, which have been addressed in ACIL's final report. Other issues raised in submissions—and QCA responses where appropriate—are set out in Appendix J.

5.2 Approach to estimating retail costs for 2016–17

We have considered ACIL's advice and stakeholder feedback when making our final decisions.

ACIL used a combination of bottom-up and benchmarking methods to estimate retail costs, informed by analysis of publicly available data, observed retail market offers, and detailed confidential information provided by retailers.

ACIL analysed competitive retail market offers available across several competitive jurisdictions to derive the implied level of retail costs incurred by retailers. This analysis was conducted on both flat rate (non-time-of-use) residential tariff offers, and flat rate small business tariff offers.

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[40] Ergon Energy Queensland, submission to the QCA interim consultation paper, *Regulated retail electricity prices 2016–17*, 20 January 2016, p. 10.

[41] Origin Energy, submission to the QCA interim consultation paper, *Regulated retail electricity prices 2016–17*, 29 January 2016, p. 4.

[42] Discount rates, using a weighted average cost of capital methodology, are however necessary for estimating the time value of money associated with amortising discounts (see, ACIL's final report, May 2016), cost pass-through and some components of wholesale energy purchase costs.

[43] Minister for Energy and Water Supply, submission to the QCA draft determination, *Regulated retail electricity prices 2016–17*, 3 May 2016.

ACIL estimated the retail costs in each market offer by deconstructing the components of retail tariffs, and benchmarking the retailer costs. It started with total average customer bills based on retailer market offers, before deducting network costs and estimated energy purchase costs. The residual amount reflects the total retail cost component of each tariff.

ACIL normalised the data for known cost differences between jurisdictions, for example, costs associated with state-based energy efficiency schemes, and the estimated higher costs of smart metering in Victoria. This normalisation process produced retail cost observations that, as far as possible, can be compared on a like-for-like basis across retailers and distribution regions.[44]

While ACIL was engaged to estimate retail costs for small, large and very large business customers, it was not possible to benchmark competitive market prices available to large and very large businesses, as retailers tend to develop tailored offers for these customers. As a result, no useful information is available on competitive market prices for these segments. Our considerations of retail costs for large and very large business customers are set out at section 5.7.

Nonetheless, significant data is available on market offer prices to residential and small business customers, which has allowed ACIL to perform useful benchmarking analysis in these market segments.

To support ACIL's benchmarking analysis, the QCA issued formal information requests under the Electricity Act to retailers operating in regional Queensland, requiring them to supply cost data. This data is commercially sensitive and cannot be reproduced here.

The information provided by retailers was not sufficiently robust for ACIL to use it as the primary basis for estimating efficient retail costs. The data was of varying quality and completeness' and highlighted significant differences in the way retailers categorise costs. This outcome was not unexpected and confirms our and ACIL's view that the benchmarking approach should be the primary method of establishing efficient retail costs, with the bottom-up assessment used to test the reasonableness of the benchmark market observations.

5.3 ACIL's analysis—residential and small business tariffs

5.3.1 Market data benchmarking

In summary, ACIL's analysis indicates that:

- Average total retail costs for residential retail tariffs are close to the QCA's existing allowance. However, retailers appear to recover more of these costs from the variable component of retail tariffs than previously assumed.
- Average total retail costs are higher for small business customers than for residential customers. As is the case for residential tariffs, the market data indicates that retailers recover a greater proportion of retail costs from the variable component of small business tariffs, compared to our previous assumptions.
- There are significant differences in how retailers allocate retail costs between fixed and variable components. This also differs across customer tariff classes. For example, the data indicates that the proportion of retail costs that are recovered through the variable

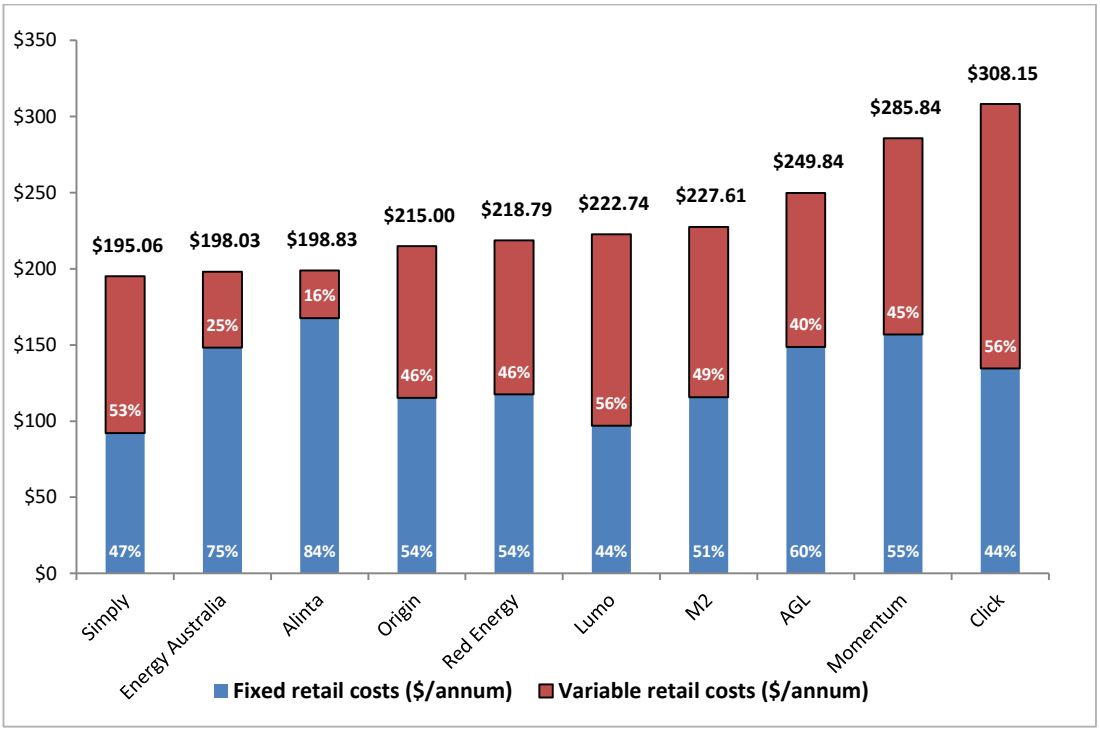
[44] For a comprehensive explanation of ACIL's methodology, please see its methodology paper (December 2015), preliminary report (March 2016) and final report (May 2016), which are available on the QCA website: www.qca.org.au.

component is higher in the case of small business tariffs than in the case of residential customer tariffs.

Residential customers

Figure 8 illustrates the total retail costs derived from residential tariff observations, and the allocations between fixed and variable components by retailer, based on an average usage of 4,640 kWh per year.[45]

Figure 8 Benchmark average total retail costs by retailer—residential customers



Note: Assumes average annual consumption of 4,640 kWh.

Based on this analysis, the total average retail cost ranges from $195 to $308 per customer per year, with the majority of observations falling between around $200 and $230 per year. Across the entire sample of observations, the average total retail cost component is $232 per year. This is similar to the equivalent total allowance in the QCA's 2015–16 determination of $246.[46]

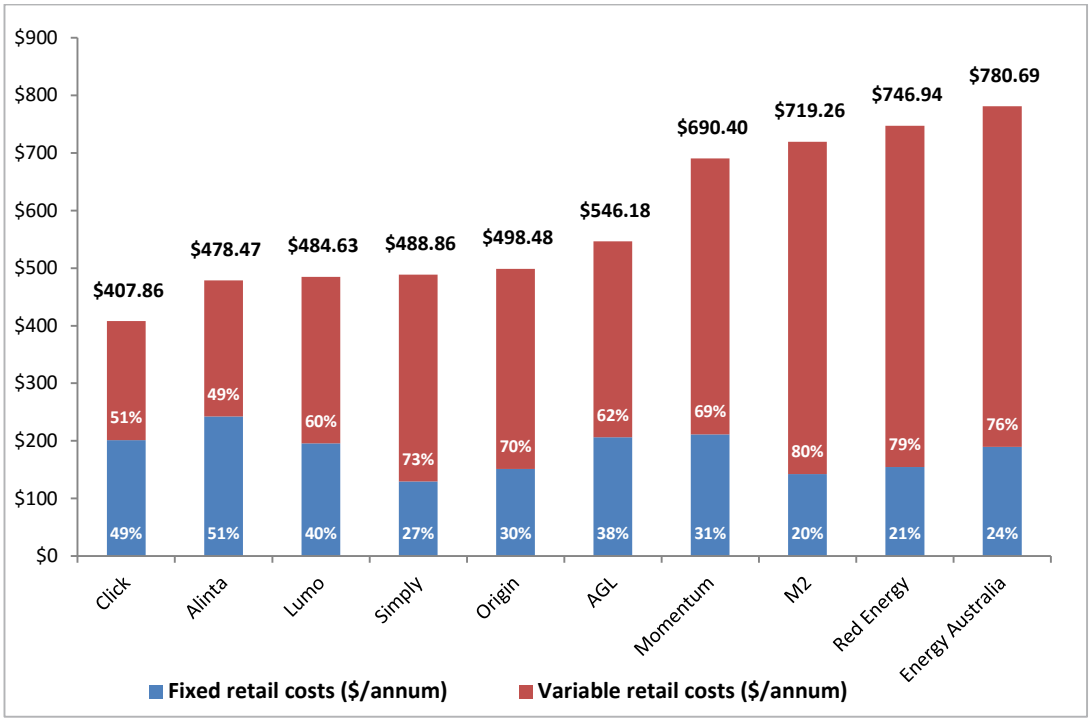
The fixed component of total retail costs ranges from $92 to $168 per customer per year, and the variable component from 0.67 to 3.74 cents per kWh.

Small business customers

Figure 9 illustrates the total retail costs derived from small business tariff observations, and the allocations between fixed and variable components by retailer, based on an average usage of 16,370 kWh per year.[47]

[45] This represents the average usage in 2014–15 for tariff 11 customers, as advised by Energex.
[46] Based on the total retail operating costs, and margin costs incurred by a tariff 11 customer consuming 4,640 kWh per year, consistent with ACIL's average usage assumptions.
[47] This represents the average usage in 2014–15 for tariff 20 customers, as advised by Energex.

Figure 9 Benchmark average total retail costs by retailer—small business customers



Note: Assumes average annual consumption of 16,370 kWh.

Based on this analysis, the total average retail cost ranges from $408 to $781 per customer per year. Across the complete sample of observations, the average total retail cost component is $604 per year. The fixed component of total retail costs ranges from $130 to $242 per customer per year, and the variable component from 1.26 to 3.62 cents per kWh.

This analysis indicates that serving customers on small business tariffs carries higher retail costs than serving residential customers, on average. Possible reasons for this cost difference include:

- different customer risk profiles and potentially a greater likelihood of default for small business customers—as a result, retailers may require a higher return on their small business customers
- the need for different marketing approaches and customer acquisition and retention strategies—for example, small businesses may be 'stickier', which might require retailers to adopt more intensive and costly marketing approaches to win new customers
- greater use of manual processes and more individual contact with small business customers compared to residential customers.

The analysis also suggests that retailers recover a greater proportion of retail costs through variable charges from small business customers, compared to residential customers. This is not unexpected, as small businesses typically have a higher usage than residential customers, which means the fixed component tends to be a smaller proportion of the overall bill than it is for residential customers.

5.3.2 QCA position

ACIL's analysis presents a range of benchmark retail cost allowances that could be adopted, along with approaches for allocating these costs to fixed and variable tariff components. Based on ACIL's analysis, we have adopted the following approach:

(1) Establish an efficient total retail cost amount (inclusive of retail operating costs and margin), based on ACIL's recommended range of benchmark retail costs.

(2) Determine how the total efficient retail cost allowance should be allocated to the fixed and variable components of retail tariffs, based on ACIL's analysis of competitive market data.

(3) Assign a retail cost allowance, and fixed/variable allocation assumption to each regulated retail tariff.

This approach differs from our previous methodology, and that used by IPART in its 2013–16 determination. However, we consider it is a robust and transparent approach, as it relies heavily on outcomes observed in competitive retail markets.

Our approach means that the retail margin cannot be isolated from any other component of the overall total retail cost. However, we do not consider it necessary to estimate an efficient retail margin, or any other discrete retail cost component. Rather, our approach focuses on estimating an efficient total level of retail costs, which implicitly includes some retail margin, portions of which are recovered through fixed and variable charges. The relationship between total retail costs and the implied retail margin is further explained in ACIL's final report.[48]

Our approach also means that variable retail costs are recovered as a percentage of underlying variable costs, similar to the way the retail margin was applied in previous years. The reasons for this approach, and how it is used to derive variable retail costs, is explained further in Appendix J.

5.4 Determining efficient total retail cost allowances—residential and small business tariffs

ACIL's analysis produced a range of potential efficient total retail cost allowances based on market data. However, we need to determine point estimates from this data to establish efficient benchmark retail cost allowances to apply to each regulated retail tariff.

5.4.1 Representative retailer characteristics

We have previously applied a 'representative retailer' model when considering retail cost allowances. This approach established a hypothetical retail entity with specific characteristics, which could be used to inform our decision on the efficient level of costs. The assumption was that certain business characteristics, such as scale and integration, are likely to influence overall retail costs.

However, it is not clear that the representative retailer concept remains useful when establishing efficient levels of retail costs, for two reasons. First, very few retailers have the characteristics of the QCA's representative retailer, and benchmarking the costs incurred by these businesses only is therefore unlikely to deliver robust results. Second, as illustrated in Figures 8 and 9, ACIL's analysis does not suggest any clear relationship between the overall level of retail costs and retailer characteristics, particularly in terms of scale. In fact, some of the smaller retailers appear to have lower retail costs than some larger incumbents.

For these reasons, we do not consider it necessary to strictly observe the previous definition of a 'representative retailer' when determining efficient retail cost allowances. Instead, we consider it appropriate to include the entire sample of observations from ACIL's analysis, rather than

[48] ACIL, *Regulated retail prices for 2016-17: Estimating the efficient retailer costs,* final report, 13 May 2016.

limiting our analysis to observations from those retailers that satisfy our definition of a 'representative retailer'.

5.4.2 Total retail cost allowances

In the draft decision we proposed using the simple average of the derived retail costs from ACIL's market observations to estimate efficient total retail cost allowances for serving small customers.

In response to the draft determination, consumer groups suggested that the retail cost allowances should be derived based on the average cost weighted by the number of customers served by each retailer (i.e. market share). ACIL modelled this approach and found that the difference in the overall retail cost for an average customer is negligible. However, the weighted-average approach results in a slightly higher fixed component for residential tariffs and a slightly higher variable component for small business tariffs. It should be noted that ACIL's analysis was based on a number of assumptions regarding retailer market shares, due to the lack of a complete publicly-available data set.

Table 8 compares the retail cost estimates based on simple averages (as used in the draft determination) with ACIL's market share weighted-average estimates.

Table 8 Comparison of simple average and market share weighted-average retail cost estimates

Customer class	*Simple average*			*Weighted-average*		
	Fixed charge ($/year)	Variable charge (c/kWh)	Total retail cost ($/year)	Fixed charge ($/year)	Variable charge (c/kWh)	Total retail cost ($/year)
Residential	127.93	2.25	232.21	130.50	2.21	233.04
Small business	181.56	2.58	603.79	175.21	2.62	604.10

Notes: Based on average annual consumption in 2014–15 of 4,640 kWh for residential tariffs and 16,370 kWh for small business tariffs, as advised by Energex. Totals may not add up due to rounding.

The suggestion to weight retail cost observations by customer numbers appears to be based on the assumption of an inverse relationship between retailer size and total retail costs. If this assumption is true, weighting the observations by market share would be expected to produce retail cost estimates that are lower than the simple average outcomes. However, this is not the case, as illustrated in Table 8 above. In addition, as noted in section 5.4.1, ACIL's benchmarking does not reveal any clear relationship between retail costs and retailer size (see Figures 8 and 9).

Using a weighting approach also has other limitations. Firstly, accurately weighting observations by retailer market share requires data that is not publicly available in all jurisdictions. Relying on data that is not publicly available results in a less transparent methodology, which is contrary to the requests of consumer groups for improved transparency around the modelling approach. Secondly, it adds complexity and may result in the need to re-estimate retail costs in response to any significant changes in market shares.

For these reasons, we remain of the view that using the simple average of all observations is an appropriate method for determining point estimates from the benchmarking observations, for this determination.

ACIL's analysis reveals there is a marked difference between the average retail costs of serving small business and residential customers. We consider this difference is sufficient to warrant

separate retail cost allowances. This means that typical small business customers will pay a higher retail cost than typical residential customers on average, compared to 2015–16.

Inflating retail costs to 2016–17 values

ACIL's market observations reflect retail costs from 2015–16 prices. As a result, we need to consider whether those values should be indexed to 2016–17 dollar terms.

ACIL has proposed that the fixed retail costs be held at the 2015–16 level for 2016–17. ACIL formed this view after reviewing confidential information provided by retailers, and published financial results, which suggest that that the expected growth in wages and materials costs in 2016–17 appears to be offset by expected productivity improvements.

No stakeholders commented on this matter.

Our final decision is to accept ACIL's advice that the 2015–16 benchmark retail costs should be applied without escalation in 2016–17 notified prices. We will need to revisit this issue in the future (discussed in section 5.9).

5.4.3 QCA position

Our final decision is to establish two separate retail cost allowances to reflect the estimated efficient costs of supplying residential and small business customers, based on the averages of ACIL's benchmarking observations. Table 9 sets out the total retail cost allowances for residential and small business customer tariffs for 2016–17. These are based on the simple average of market observations derived from ACIL's benchmarking analysis, summarised in Figures 8 and 9.

Table 9 Benchmark average retail costs—residential and small business customers

Customer class	*Total retail costs ($/annum)*
Residential	$232.21
Small business	$603.79

Note: Based on average annual consumption of 4,640 kWh for residential tariffs and 16,370 kWh for small business tariffs. These averages represent averages across the entire data samples, and do not represent averages of the values depicted in Figures 8 and 9.

5.5 Determining fixed and variable retail cost components—residential and small business tariffs

Having determined an aggregate retail cost amount based on an average level of consumption, we need to consider whether these costs should be recovered through fixed or variable charges, or a combination of both.

Generally, the principle of cost reflectivity informs the decision on where the retail cost allowances should apply in each tariff. If retail costs are mostly fixed, they should generally be applied to the fixed tariff component; if they are mostly variable (they change with the level of usage), they should generally apply to the variable tariff components. In previous determinations, we allocated the retail operating costs allowances to the fixed component of retail tariffs only, as we had no strong evidence to conclude that these costs varied with energy usage. The retail margin was applied as a percentage of total costs, which means it had a fixed and variable component.

Stakeholders expressed mixed views on how retail costs should be allocated between fixed and variable components. In response to the interim consultation paper, the Queensland Consumers Association submitted:

> *The Association emphasises the need for these to be accurately and fairly allocated given that they have major impacts on the bills of different types of consumers and on incentives to change consumption.*
>
> *In this regard the Association requests that the review of ROC establish the extend [sic] to which any significant retail costs, for example financing costs, are volume related and take these into account when deciding whether to continue to regard all retails costs as fixed and to add them to the daily charge.* [49]

In contrast, Toowoomba Regional Council considered that:

> *…the [retail operating costs] should be a fixed rate for each account and should not be linked with consumption and hence the variable component.* [50]

Ergon Retail also considered the majority of retail costs are fixed, stating:

> *EEQ supports the principle of cost reflectivity, in the application of ROC, to fixed and variable charges. In EEQ's view, a majority of the costs included in the QCA's definition of [retail operating costs] represent fixed charges. Applying the ROC to the fixed component of notified prices is likely to be the most appropriate approach. However, consideration should be given to the impact of fixed charges on customers with low usage, in particular, those who are vulnerable or experiencing financial hardship.* [51]

Ergon Retail also noted, in the context of estimating the retail margin, that amortisation and depreciation should be captured in the fixed retail cost component, rather than the variable (margin) component. It noted:

> *Many retailers are reducing the number of acquired assets and instead using service arrangement for their systems and required assets (e.g. IT systems, buildings, etc). The reclassification of depreciation and amortisation expenses from retail margin to ROC will assist with future benchmarking process.* [52]

Origin Energy also considered that the fixed component should be higher, stating:

> *Origin does not agree with the proposed rebalancing of the fixed and variable components of the retail tariff. It does not reflect a true allocation of costs to customers in Queensland and it may lead to the cross subsidisation between customer segments as retailers attempt to recover fixed costs.*[53]

The preference for higher fixed charges among retailers is understandable, as it provides greater revenue certainty, particularly when consumption is declining. It is also understandable that large customers would prefer a fully fixed retail cost allowance, as this means retail costs would likely represent a relatively smaller portion of their overall bill.

In practice, fixed and variable retail costs are closely related and dependent on retailer preferences, as ACIL noted:

> *The allocation of costs between the two categories may sometimes be arbitrary and for a given retailer may change over time. A retailer could, for example, invest in IT and increase the level of*

[49] Queensland Consumers Association, submission on the QCA interim consultation paper, *Regulated retail electricity prices for 2016–17*, 18 January 2016, p. 2.
[50] Toowoomba Regional Council, submission on the QCA interim consultation paper, *Regulated retail electricity prices for 2016–17*, 17 December 2015, p. 2.
[51] Ergon Energy Queensland, submission on the QCA interim consultation paper, *Regulated retail electricity prices for 2016–17*, 20 January 2016, p. 9.
[52] Ergon Energy Queensland, submission on the QCA interim consultation paper, *Regulated retail electricity prices for 2016–17*, 20 January 2016, p. 9.
[53] Origin Energy, submission on the QCA draft determination, *Regulated retail electricity prices for 2016–17*, 20 April 2016, p. 1.

> *automation in the business, which may decrease the fixed retailer cost (the costs to serve a customer) and increase the variable retailer cost (the return on and of the IT assets).*[54]

In setting its fixed retail cost allowance at the mid-point of the estimated range for its 2013–16 determination, IPART also acknowledged this trade-off between fixed and variable costs:

> *[Setting the retail operating cost allowance at the mid-point] ... takes account of the fact that retailers' capital expenditure decisions are not captured in the methodology used to estimate the retail margin. If retailers have lower ROC because of higher capital expenditure, then setting ROC at the low end of the range may understate their total costs given our method for estimating the retail margin. Further, choosing the lower end of the range may place too much weight on one retailer's data, given that the differences across retailers' data are driven partly by differences in their reporting and cost allocation methods.* [55]

5.5.1 Market data benchmarking

Our previous methodology for applying retail costs implies recovery of around 77 per cent of total retail costs (retail operating costs and margin) through the fixed component for residential tariffs and around 50 per cent for small business tariffs.[56] However, ACIL's analysis indicates the fixed component is generally smaller on average.

For residential customers, the market data analysis reveals that 45 per cent of retail costs are recovered through variable charges and 55 per cent through fixed charges, on average. This allocation is quite different for small business tariffs, where around 30 per cent of costs are recovered through fixed retail charges, and 70 per cent through variable charges, on average. This is understandable, as small businesses typically have higher usage than residential customers, which means the fixed component tends to be a smaller proportion of the overall bill than it is for residential customers.

ACIL's analysis also reveals differences in how individual retailers recover retail costs from fixed and variable tariff components. Notwithstanding these differences, there is a clear inverse relationship between the two components—higher fixed retail costs tend to be offset by lower variable retail costs and vice versa.

5.5.2 Confidential retailer data—bottom-up analysis

Confidential data supplied by retailers was varied and did not allow us to draw any firm conclusions on the appropriate allocation of retail costs between fixed and variable components. However, it has provided some guidance on the likely reasonable range of the fixed retail component.

ACIL analysed the confidential retailer data and derived a reasonable range for the fixed component of retail costs for small customers of between $80 and $175 per customer per year. This range effectively reflects the upper and lower limit of costs that could potentially be treated as fixed retail costs by a retailer. The lower limit includes only those costs that are typically considered to be directly related to customer numbers such as call centres, billing and revenue collection and customer acquisition and retention costs. The upper limit includes those same costs and others that could be considered fixed, but which retailers may choose to recover through variable charges. These costs include depreciation, amortisation, tax and interest

[54] ACIL, *Regulated retail prices for 2016–17: Estimating the efficient retailer costs,* final report, 13 May 2016.
[55] IPART, *Review of regulated retail prices and charges for electricity from 1 July 2013 to 30 June 2016*, June 2013, p. 105.
[56] Based on 2015–16 tariff 11 notified prices with the average annual usage of 4,640 kWh, and 2015–16 tariff 20 notified prices with annual average usage of 16,370 kWh.

payments, which have typically been considered as recovered through the variable retail component (the retail margin in previous determinations).

The mid-point of the estimated range of the fixed retail cost component derived from the retailer data is $127.50. This is very close to the average fixed component of residential retail costs derived from the market data analysis, which supports the validity of the benchmarking observations.

5.5.3 QCA position

While retailers considered that the fixed component of retail costs should be higher, no new information or evidence was provided to support this view. On this basis, we consider using the allocation implied by the average fixed and variable retail cost allowances derived from ACIL's market observations remains a reasonable approach to allocating total benchmark retail costs. Details on how the fixed and variable components have been applied are set out in Appendix J.

Adopting the average benchmark allocation between fixed and variable components would see residential and small business notified prices 'rebalanced' to place greater weight on recovery of costs through variable charges. For tariff 11 customers, this would result in a reduction in the fixed daily charge of around 17 cents per day, and an increase in the variable charge of 1.17 cent per kWh. For small business customers, this would result in a reduction in the fixed daily charge of around 3.8 cents per day, and an increase in the variable charge of 1.59 cents per kWh.[57]

The allocation between fixed and variable components has distributional implications for different customers. Recovering a larger proportion of retail costs from the fixed component will have a proportionally greater impact on low-usage customers (as fixed costs are a relatively larger part of their bill), while recovering more costs through the variable component will have a relatively greater impact on high-usage customers.

5.6 Assigning fixed and variable retail costs to residential and small business customer tariffs

After establishing the total retail cost allowances, and the benchmark allocation between the fixed and variable components, we then determined the appropriate way to assign these allowances to each individual retail tariff.

Flat rate tariffs and time-of-use tariffs—tariffs 11, 12A, 20, 22 and 22A

Tariffs 11 and 12A can be accessed by residential customers and small business customers. However, they can only be accessed by small business customers in conjunction with a primary small business tariff. Likewise, tariffs 20 and 22 can be accessed by residential customers in some circumstances. However, the predominant users of tariffs 11 and 12A are residential customers, and small business customers are the predominant users of tariffs 20 and 22. As such, we have decided to apply the small business retail cost allowance to tariffs 20, 22 and 22A, and the residential retail cost to tariffs 11 and 12A.

Demand tariffs—tariffs 14, 24, 41

Tariff 14 is a residential tariff and tariffs 24 and 41 are small business tariffs. We have applied the corresponding retail cost allowance to each of these tariffs.

[57] This represents the impact on the retail cost component only and assumes all other costs are held constant.

In previous decisions we applied the retail margin equally (on a percentage basis) to all components of each retail tariff, including demand charges. We consider this approach remains appropriate for apportioning variable retail costs to tariff components that are not volume related, such as demand charges. We have applied the relevant variable retail cost percentage allocators set out in Table 37, column E (Appendix J) to the demand and usage components of each of these tariffs.

Controlled load tariffs—tariffs 31 and 33

Tariffs 31 and 33 are available to both residential and small business customers. However, we note the majority of customers accessing these tariffs are residential, and we have therefore applied the benchmark retail cost allowance for residential customers.

We previously decided not to apply fixed retail cost allowances to the controlled load retail tariffs, because we assumed that customers accessing those tariffs would also access another general supply tariff (e.g. tariff 11 or 20) and pay their fixed retail costs through that tariff.

In 2016–17, we will continue with this approach and apply only a variable retail cost to tariffs 31 and 33.

Unmetered loads—tariff 91

Tariff 91 is available for small unmetered supplies (other than street lighting) as approved by the distribution business. This tariff is primarily used for loads that are predictable and reasonably calculated without metering, or where it would not be cost-effective to install a meter. As tariff 91 is intended for small loads, we have applied the small business variable cost percentage allocator to the usage charge of tariff 91.

In previous decisions, we did not apply a fixed retail cost component to tariff 91, because customers accessing this tariff were also likely to be supplied under another general supply business tariff. We have decided to continue this approach in 2016–17.

Transitional arrangement for small business retail costs

As noted in section 5.3, adopting ACIL's analysis means higher retail costs for small business customers compared with 2015–16. In isolation, the shift from the IPART benchmark to ACIL's benchmark estimate is responsible for around four percentage points of the overall 11.2 per cent increase in a typical tariff 20 customer bill in 2016–17. We have considered the suggestion by the Minister to transition the impact of this change over more than one determination period.

While we previously transitioned the rebalance of tariff 11 after the move away from the Benchmark Retail Cost Index (BRCI) approach to setting notified prices, that was about removing a cross-subsidy within the residential customer group, not holding prices below cost for an entire customer group. We have also previously transitioned the move from some BRCI tariffs to standard business tariffs, but only where there were very substantial customer impacts.

In contrast, we have not previously transitioned the impacts of changes in individual cost components, even where those changes have been very substantial. The reasoning behind that approach has been that transitioning changes in individual cost components would mean setting prices that are below the actual costs of supply (or further below the actual costs of supply in regional Queensland).

Transitioning the change in retail costs for small business customers would result in prices being set at a level that is further below the actual costs of supply in regional Queensland. Setting prices further below cost will also have an adverse impact on retailers, other than Ergon Retail, that

supply small business customers in regional Queensland. Based on information provided by Ergon Distribution, these retailers supply almost 3,500 small business customers in regional Queensland. They are likely making a significant loss on these customers, as they do not receive the Customer Service Obligation (CSO) payment that allows Ergon Retail to provide subsidised prices; they also cannot transfer these customers back to Ergon Retail.

Further, transitioning the change in retail costs would likely result in notified prices that are lower than expected standing offer prices in south east Queensland, which would be inconsistent with the UTP. In addition, it would necessitate a 'catch-up' of costs in 2017–18, which would likely see notified prices for small business customers increase again, regardless of any increases in actual underlying costs.

For these reasons, we have decided that the change in the retail cost allowances for small business should be passed through in full in 2016–17.

5.6.1 QCA position

Our final decision is to apply the total retail cost allowances to the fixed and variable components of retail tariffs based on the average allocation derived from ACIL's analysis (see Table 8), and the variable cost percentage allocators set out in Table 38 (Appendix J). Table 39 (Appendix J) summarises the application of these costs to each retail tariff. Consistent with our previous determinations, secondary retail tariffs do not attract a fixed retail cost allowance.

5.7 Large and very large business customer tariffs

For the reasons set out in section 5.2, ACIL has advised that there is no compelling evidence that the retail costs for large and very large business customers should vary from the QCA's previous allowances.

Stakeholders expressed differing views on the appropriate level of retail costs for large business customers. Toowoomba Regional Council stated:

> *Council questions the finding that the costs to serve large and very large customer is higher than for small and residential customers. In fact, Council believes the opposite to be true. Large and very large accounts are likely to be controlled by organisations with multiple accounts and hence availing themselves of electronically issued consolidated invoices. Whereas small and residential customers are invoiced on paper for each individual account [sic]. Council considers that the cost to administer a large or very large account would be similar if not less than the cost to administer a small account, and hence does not support the proposal to continue to charge larger accounts with a higher ROC.* [58]

In contrast, Ergon Retail submitted that large customers are more costly to serve than small customers and supported separate allowances for large customers:

> *The requirements of large and very large customers often result in more tailored product offerings and bespoke servicing. This impacts operational activities across multiple functions within a business including:*
>
> - *Customer administration (call centre specialists and dedicated customer service representatives)*
> - *Trading*
> - *Billing and revenue collection*

[58] Toowoomba Regional Council, submission to the QCA interim consultation paper, *Regulated retail electricity prices 2016–17*, 17 December 2015, p. 2

- *CARC.* [59]

We note Toowoomba Regional Council's suggestion that retail costs should be lower for large and very large customers. While potential cost savings could be made by consolidating billing for large customers with multiple accounts, other characteristics of the relationship between a retailer and large customer may lead to higher costs, as noted by Ergon Retail.

We also note that Frontier Economics previously examined this issue and found that it costs considerably more to serve large customers than small customers.[60] This cost difference was based on the higher costs of marketing, account management, and pricing of large customer loads.

5.7.1 QCA position

On balance, we consider there is no conclusive evidence to suggest that the retail cost allowances for large and very large business customers in 2016–17 should be materially different from those allowed in 2015–16.

Therefore, our final decision is to base retail costs for large and very large business customers on our 2015–16 allowances, with the fixed retail components escalated by forecast inflation to maintain them in real terms. Details on how we have applied retail costs to each pricing component are set out in Appendix J.

Table 12 sets out our decision on retail cost allowances for each large and very large business tariff.

5.8 Retail cost allowances for 2016–17

Tables 10 to 12 set out our final decisions on the retail cost allowances for each regulated retail tariff for 2016–17. Each fixed retail cost component includes an allowance for QCA regulatory fees, as set out in Table 41 of Appendix J.

[59] Ergon Energy Queensland, submission to the QCA interim consultation paper, *Regulated retail electricity prices 2016–17*, 20 January 2016, p. 8.

[60] Frontier Economics, *Retail Operating Costs*, report prepared for the Economic Regulation Authority of Western Australia, February 2012.

Table 10 Final determination—retail costs for residential customers and controlled loads for 2016–17 (GST exclusive)

Retail tariff	*Pricing component*				
	Fixed retail component (c/day)	Usage (c/kWh)		Demand ($/kW/month)	
		Peak	Off-peak/flat	Peak	Off-peak/flat
T11	35.107		2.376		
T12A	35.107	5.392	1.917		
T14	35.107		1.447	5.963	1.086
T31	n/a		1.393		
T33	n/a		1.927		

Table 11 Final determination—retail costs for small business customers for 2016–17 (GST exclusive)

Retail tariff	*Pricing component*				
	Fixed retail component (c/day)	Usage (c/kWh)		Demand ($/kW/month)	
		Peak	Off-peak/flat	Peak	Off-peak/flat
T20	49.790		2.807		
T22A	49.790	5.108	2.519		
T24	49.790		1.762	9.165	1.506
T41	49.790		1.472		3.117
T91			2.527		
T22 (transitional)	49.790	3.052	2.448		

Table 12 Final determination—retail costs for large business, very large business and street lighting customers for 2016–17 (GST exclusive)

Retail tariff	*Pricing component*				
	Fixed retail component (c/day)	Usage (c/kWh)		Demand ($/kW/month)	
		Peak	Off-peak/flat	Peak	Off-peak/flat
T44	492.445		0.668		2.164
T45	1117.230		0.673		1.718
T46	2632.909		0.684		1.527
T47	2372.031		0.628		1.406
T48	2787.627		0.628		1.406
T50	456.956	0.643	0.829	3.322	0.801
T71	n/a		1.711		

5.9 Updating the retail cost allowances from year to year

A thorough bottom-up and benchmark review of the efficient retail cost allowance represents a time-consuming and costly exercise, and places a significant reporting burden on electricity retailers. We consider that the cost of doing this exercise on a yearly basis would most likely outweigh any incremental benefit over the short term. Rather, we envisage that a thorough review of retail costs for the 2016–17 determination should produce robust estimates that can then be updated annually using a defined escalation method.

Any form of annual escalation could not be conducted indefinitely, and a further detailed review of retail costs would need to be conducted in due course. This would become particularly important if there were material changes in cost drivers that flowed through to retail costs.

5.9.1 QCA position

With the exception of retail costs for large and very large business customer tariffs, the escalation of benchmark retail cost allowances is not necessary in 2016–17. For this reason, we have deferred our consideration of this issue to next year, should we be delegated the task of setting notified prices.

6 OTHER ISSUES

This chapter sets out our final decisions on the inclusion of additional allowances above the estimated efficient costs of supply, and the cost pass-through mechanism. Our final decisions are to:

- *provide an allowance for headroom of five per cent of the estimated efficient costs of supply for all large business customer retail tariffs, consistent with our 2015–16 determination*
- *include a five per cent allowance above the estimated efficient costs of supply in south east Queensland for all residential and small business customer tariffs, to reflect the difference between the expected level of market offer prices and standing offer prices in 2016–17*
- *require the negative pass-through of a small over-recovery of Small-Scale Renewable Energy Scheme (SRES) costs incurred during 2015–16.*

6.1 Allowances above the efficient costs of supply

Under section 90(5)(a) of the Electricity Act, we are required to have regard to the effect of our price determination on competition in the Queensland retail electricity market. We must also have regard to the objects of the Electricity Act, which include:

(a) establishing a competitive electricity market in line with the national electricity industry reform process

(b) taking into account national competition policy requirements.

Where it is effective, we consider that competition provides the best means of delivering the goods and services that customers demand at prices that reflect efficient costs. In previous determinations, we have included an allowance for 'headroom' to facilitate the development of retail competition in south east Queensland for residential and small business customers, and in regional Queensland for large business customers. The headroom allowance is an amount, in addition to the estimated efficient cost of providing customer retail services, included in notified prices for the purpose of encouraging customers to engage in the market and seek out more attractive market offers. Since the 2012–13 determination, we have set this allowance at five per cent of total estimated efficient costs.

Retail competition in the residential and small business customer market is very limited outside of south east Queensland. This is largely because the Queensland Government's Uniform Tariff Policy (UTP) delivers a subsidy to Ergon Retail to supply electricity at notified prices which are, in most cases, well below the true cost of supply. Other retailers cannot access this subsidy and therefore typically cannot compete with Ergon Retail's subsidised notified prices. While headroom has performed the function of encouraging competition in the south east Queensland market where there is a choice of retailers, the inclusion of headroom in notified prices for small customers in regional Queensland has been a consequence of the UTP, rather than a means of promoting competition.

While we are setting notified prices to apply in regional Queensland only, headroom remains a relevant issue for 2016–17. Firstly, headroom is an important consideration when setting notified prices for large and very large business customers in the Ergon Distribution area, as many of these customers have access to competition. This is discussed further in section 6.1.2. In the draft determination, we applied a headroom allowance of five percent of total costs for large and very large business customer tariffs, consistent with our approach in previous years.

Headroom is also a relevant concept when determining the expected level of standing offer prices for small customers in south east Queensland. Conceptually, headroom can be likened to the increment of standing offer prices over market offer prices where we assume that market offer prices are based on the efficient costs of supply. In the draft determination, we considered that there would likely be differentials between market and standing offer prices in south east Queensland in 2016–17, and there were no reasons to conclude that those would be any different to the differentials between market offer prices and notified prices observed in the market in 2015–16. On this basis, we proposed to apply an allowance of five per cent above the estimated efficient costs of supply, to reflect expected standing offer prices for small customer tariffs.

Submissions

Canegrowers Isis, Canegrowers, Cotton Australia, FNQEUN, QCOSS, and QFF opposed the inclusion of headroom in regulated retail tariffs on the basis that it increases prices for regional customers, most of whom do not have access to competitive market offers.

In contrast, Ergon Retail and Origin Energy supported the continued application of a five per cent headroom allowance for large and very large business customer tariffs.

Ergon Retail supported a standing offer differential of five per cent for small customer tariffs, but recommended the QCA review this approach in following years as the deregulated market in south east Queensland matures. The Queensland Consumers Association suggested that the QCA should consider weighting each observed discount by the retailer's market share when determining the differential required to establish expected standing offers prices.

QCOSS suggested that the analysis of price differentials should include market offers that are above the notified price level, which the QCA purposely excluded from the analysis. These issues are addressed below.

6.1.1 Estimating price differentials in south east Queensland—residential and small business customers

Notwithstanding some stakeholders' opposition to the concept of headroom, the Queensland Government's definition of the UTP leads the QCA to set 2016–17 notified prices for small customers in regional Queensland that broadly reflect the expected level of standing offer prices in south east Queensland (see section 2.2.1). As discussed below, market prices in south east Queensland reveal that most retailers' best market offers are generally lower than notified prices in 2015–16, albeit by varying amounts. In essence, these price differentials represent a form of 'headroom' reflecting the amount competed away through conditional and non-conditional discounts.

The QCA uses an N+R bottom-up approach to derive the estimated efficient costs of supplying small customers in south east Queensland. In broad terms, this produces price levels that we would expect to reflect efficient market offer prices. To estimate the expected level of *standing offer prices*, it is necessary to add an amount that represents a reasonable expectation of the difference between expected efficient market offer prices and expected standing offer prices.

Why is there a difference between market and notified prices?

There are a number of possible reasons why notified prices tend to be higher than market offer prices. In many cases, the difference reflects the fact that the notified price contracts often provide terms and conditions that are more favourable to the customer. The premium could then be considered as compensation to the retailer for accepting the additional costs and risks associated with providing those terms and conditions.

Through market offers, retailers are able to adopt different terms and conditions designed to reduce their direct costs or risks, which may enable them to offer a better price or other incentives to the customer. For example:

- Incentivising customers to pay on time can reduce a retailer's bad debt risk, improve its cash flow position and reduce costs.
- Requiring customers to use direct debit payment methods achieves a similar outcome, and many retailers offer discounts to customers who use it, to reflect the lower risk of default and bad debts.
- Requiring customers to subscribe to online-only (paperless) billing allows retailers to save on printing and postage costs.

The difference between market and notified prices may also be an indication of differential pricing strategies, whereby retailers target different customer segments with different prices, according to their sensitivity to price changes. Standing offer prices will most likely be taken up by non-price-sensitive customers (e.g. Solar Bonus Scheme and small consumers) and as such will be set artificially high.

What is an appropriate price differential to apply to efficient costs?

In previous price determinations, when notified prices were also being set for south east Queensland customers, we estimated the efficient cost of providing customer retail electricity services and increased that amount by five per cent to reflect the headroom allowance. However, when setting small customer notified prices for the 2016–17 determination, our aim is to form a view on the expected price differential between market offers and expected standing offers, and build that amount onto our estimate of the efficient costs of supply in south east Queensland to arrive at an expected standing offer price level. We have considered the following matters when estimating this expected price differential:

- the potential effect of deregulation on retail prices
- the experience in other deregulated jurisdictions
- observed price differentials in the south east Queensland market.

Price deregulation

From 1 July 2016, retail electricity prices will be deregulated in south east Queensland and retailers will be able to set standing offer prices at levels of their own choosing, rather than using notified prices. This clearly has the potential to influence the differential between market and standing offer prices in 2016–17.

There are differing views on the likely effect of price deregulation on standing offer prices in 2016–17. Canegrowers considered that standing offer prices would fall following deregulation, noting:

> *the change to price monitoring in SEQ is likely to trigger further changes to prices and innovation in the value propositions that retailers offer customers connected to the Energex network. It is likely that 'standing offer prices' in SEQ will be below existing price levels and well below the prices foreshadowed in QCA's [2016–17] draft determination.*[61]

[61] Canegrowers, *submission to the QCA Draft Determination Regulated Retail Prices for 2016–17*, 21 January 2016, p. 4.

A contrasting view is that deregulation will lift the constraints on retailers and allow them to potentially set standing offers that are higher than the notified prices that applied in south east Queensland in 2015–16. As Canegrowers Isis observed:[62]

> *Standing offer prices will most likely be taken up by non-price-sensitive customers (eg. Solar bonus scheme and small consumers) and as such will be set artificially high.*

However, there are countervailing factors that may influence retailers' pricing decisions. First, the legislative provisions which give effect to price deregulation in south east Queensland from 1 July 2016 include provisions for independent price monitoring, and the option for the Queensland Government to reinstate retail price regulation if necessary. These factors are likely to moderate incentives to set standing offer prices in 2016–17 that are significantly higher than the notified prices that applied in south east Queensland in 2015–16.

Second, there is likely to be some circularity between the notified prices we determine for regional Queensland, and standing offer prices that eventuate in the deregulated south east Queensland market in 2016–17. As the Queensland Productivity Commission (QPC) noted:

> *The QCA's approach to setting regulated retail electricity prices in regional Queensland based on the cost of supplying customers in SEQ is also likely to provide a benchmark price for standing offers in SEQ going forward.*[63]

Therefore, while retailers may have plausible reasons to set their standing offer prices in 2016–17 at levels above or below the notified prices which applied in south east Queensland in 2015–16, these reasons do not provide a sufficient basis to predict how standing offer prices might be set immediately after deregulation.

Experience in other deregulated jurisdictions

Jurisdictional experience of standing offer price movements following retail market deregulation is mixed. In Victoria, where the electricity retail market was deregulated in 2009, the difference between market and standing offers has increased considerably in the eight years since deregulation, reaching up to 18 per cent in some cases.[64] This is likely indicative of increased rivalry in a more mature market, with increased discounting made possible by differential pricing and a base of price-insensitive or 'sticky' customers remaining on standing offers. In South Australia and New South Wales (NSW), where the governments have deregulated more recently (February 2013 and July 2014, respectively), standing offer prices in the early years of deregulation have been influenced by other factors and are not likely to be representative of expected outcomes in the south east Queensland market in 2016–17.

When the South Australian retail market was deregulated on 1 February 2013, the South Australian Government reached an agreement with AGL (the incumbent first tier retailer) to lower its residential standing offer prices by 9.1 per cent and small business tariffs by 4.5 per cent following deregulation, and to cap increases in the retail component of the standing offers for two years.[65] Preliminary observations of South Australian market prices from early March 2016, immediately after the controls on standing offers were lifted, indicate that the difference

[62] Canegrowers Isis, *Submission to interim consultation paper*, 18 January 2016, p. 1.
[63] QPC 2016, *Electricity pricing inquiry*, draft report, 3 February 2016, p. 124.
[64] See AER, *State of the Energy Market 2015*, p. 137.
[65] Government of South Australia, *Lower prices for South Australia*, media release, 18 December 2012. Available at http://archives.premier.sa.gov.au/images/news_releases/12_12Dec/energyprice.pdf, accessed 19 February 2016.

between standing offer prices and retailers' cheapest market offer prices for residential customer tariffs ranges between zero and 20 per cent, with an average of around 8 per cent.[66]

Similarly, when the NSW retail market was deregulated on 1 July 2014, small customers who were on a regulated contract were moved to a 'transitional tariff' for up to two years, after which they would be required to move to a market offer. In the first year of deregulation, the NSW Government approved arrangements that would see the transitional tariff decrease by at least 1.5 per cent from existing standing offer prices. In the second year, average increases in the retail component of the transitional tariff were capped at CPI.

Evidence of price differentials in south east Queensland

We also analysed standing offers and market offers available to customers in south east Queensland using the AER's 'Energy Made Easy' online price comparison facility to reveal the current price differentials in the market.

Standing offers are basic contracts with regulated terms and conditions. In markets with price regulation (such as south east Queensland in 2015–16), standing offer prices are the notified prices. In markets without price regulation, standing offers are set by the retailer. They also tend to be the benchmark price from which retailers offer discounted market prices.

From our analysis, it is clear that the market offers of most south east Queensland retailers are materially lower than standing offers set at 2015–16 notified price levels. At the time of our observations in early February 2016, retailers' best discounts off a typical annual residential bill based on a flat rate tariff (i.e. a tariff 11 equivalent) ranged from zero to 10.2 per cent[67], with an average of around 5.5 per cent.[68]

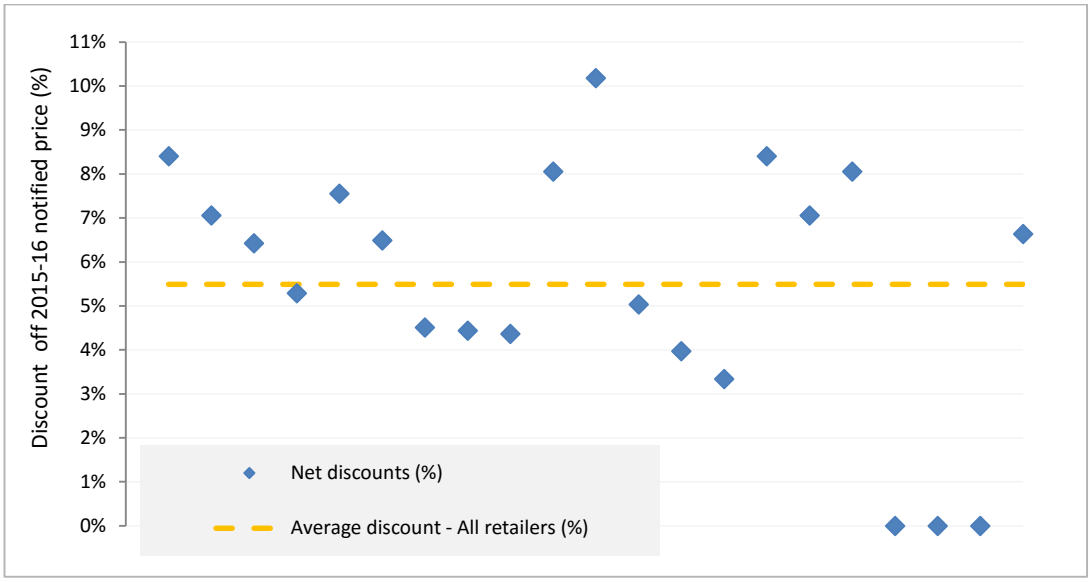
Analysis conducted on offers available to small businesses in south east Queensland yielded similar results. Based on the sample of market offers available to small businesses on a flat-rate tariff (i.e. a tariff 20 equivalent), net discounts off a typical annual small business customer bill are in the range of zero to 10 per cent, with an average of 5.6 per cent. Figures 10 and 11 illustrate the results of this analysis.

[66] QCA analysis of results from https://www.energymadeeasy.gov.au/, accessed on 11 March 2016. Based on typical annual residential usage of 3,870 kWh and excluding zero-discount offers, except where they are the only tariff offered by the retailer.

[67] QCA analysis of data from www.EnergyMadeEasy.com as at 3 February 2016. This analysis assumes a typical annual usage of 3,860 kWh, which is the median tariff 11 consumption in 2014–15 as advised by Energex. Net discounts are calculated as the net impact of one-off sign-up bonuses, conditional and non-conditional discounts, as well as any account establishment or connection fees that might offset some of the headline discount available. The analysis does not take account of those market offers that feature prices higher than the notified prices. These offers have been excluded from our analysis as it is not clear that a significant number of customers would take up these offers.

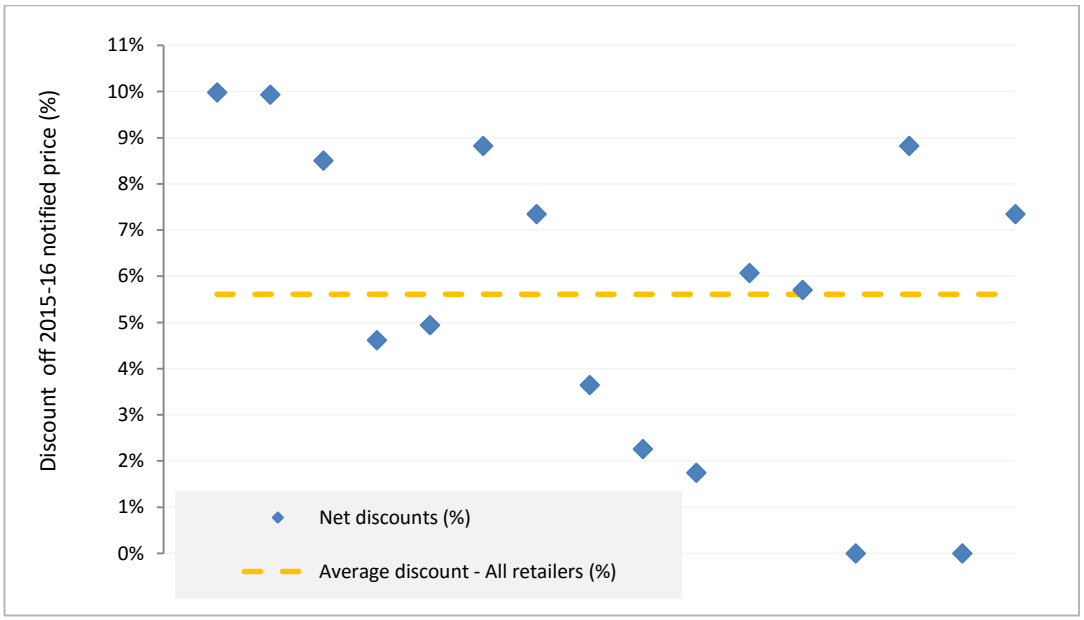
[68] We note that the AER has published market discount analysis in its 2014 and 2015 State of the Energy Market reports which suggest lower average discounts, closer to two per cent. However, we do not have access to the underlying assumptions of this analysis and as such have been unable to replicate these results.

Figure 10 Discounts available in south east Queensland at February 2016: Residential flat rate tariffs



Note: Discounts are calculated based on the estimated annual bill of a typical customer consuming 3,860 kWh per year.

Figure 11 Discounts available in south east Queensland at February 2016: Small business flat rate tariffs



Note: Discounts are calculated based on the estimated annual bill of a typical customer consuming 6,470 kWh (the median tariff 20 consumption in 2014–15 as advised by Energex) per year.

This analysis is indicative only for illustrating the existence of price differentials in the south east Queensland market, and has some limitations. Most notable is the constraint created by regulated prices in 2015–16, which means that retailers' standing offer prices are set at notified price levels. As a result, the differential between market and standing offer prices can only be driven by retailers changing their market offer prices. In deregulated markets, retailers are able

to change the level of both their standing offer and market offer prices.[69] For this reason, we do not consider it appropriate to use the observed average price differential in 2015–16 as a direct proxy for the expected price differential in 2016–17. Other limitations of this analysis include:

- Point-in-time observations such as these taken from price comparison websites do not capture market offers that some customers may currently be receiving, but which are no longer available (or advertised) to new customers.
- We do not have sufficient information to determine how many customers are receiving each market offer, so it is not possible to determine a weighted-average effective discount across the whole market, which would offer a more representative estimate of the level of price differentiation in the market.
- This analysis is sensitive to the annual usage assumptions, particularly given that most retailers offer discounts off the usage component only, rather than the whole bill. Usage only discounts mean that high-usage customers tend to receive discounts that represent a relatively larger proportion of their overall bill than low-usage customers.

It is also important to note that each individual retailer's capacity to discount is highly dependent on its own underlying costs. These costs can vary significantly between businesses due to many factors, including degrees of efficiency, scale, productivity, risk profile, marketing strategies and other characteristics. We have not attempted to normalise the samples for these differences. These different characteristics are likely to be major drivers of the variation seen in the level of discounts across the samples, as illustrated in Figures 10 and 11.

QCA position

Based on the information available, the QCA considers that differentials between market offer and standing offer prices will prevail in south east Queensland for small customer tariffs in 2016–17. Ultimately, the size of the differential between market and standing offer prices immediately following deregulation is uncertain and will likely be the result of individual retailers' pricing strategies, changes in underlying costs of supply, and other incentives created by the regulatory and legislative environment.

As we cannot predict the size of the expected price differential with any certainty, we consider it reasonable to assume it will remain at a level similar to the differential between notified price standing offers and market offers in the south east Queensland market at the moment.

Analysis of the existing differential between notified price standing offers and retailer market offers reveals the average level of discounting is around five to six per cent for a typical small customer's total annual bill. The five per cent headroom allowance applied in 2015–16 has likely been a major contributor to the existence of this differential, among other factors.

We note the suggestion by the Queensland Consumers Association to establish the standing offer differential based on the average of discounts available in south east Queensland, weighted by each retailers' market share. This is not necessary as, in this case, the average observed discounts are not used as a direct proxy for the expected price differential in the south east Queensland market in 2016–17. Rather, the analysis of discounts above simply confirms the presence of a differential between market and standing offers (notified prices). As we have noted, this simple

[69] In the absence of temporary price controls or other negotiated outcomes, such as those seen in New South Wales and South Australia.

discount analysis has limitations, most notably that the observed differentials are influenced by regulation which has constrained standing offer price levels in 2015–16.

For the same reason, adopting QCOSS's suggestion to include market offers that are above the 2015–16 notified price level would not lead us to a different conclusion; rather, it would only change the level of observed average discount.

While stakeholders challenged our analysis and offered alternative approaches intended to produce a smaller standing offer adjustment, no evidence was provided that differentials between market and standing offer prices in 2016–17 will be any different to those currently observed in the market.

On this basis, our final decision is to add an amount above the efficient costs of supply in south east Queensland that would deliver a similar average price differential in 2016–17, all other things being constant. We consider that an amount of five per cent of total costs—equal to the headroom allowance applied in previous years' determinations—is a reasonable estimate of the amount required to deliver similar price differentials to those observed in 2015–16.

The QCA will consider whether this approach remains appropriate, should it be delegated the task of setting notified prices at standing offer price levels for 2017–18.

6.1.2 Estimating headroom for large business customer tariffs

In the draft determination we applied a headroom allowance of five per cent to large business customer notified prices. We considered this appropriate so that notified prices are not an impediment to the further development of competition in the large customer market in regional Queensland. This approach was supported by Ergon Retail and Origin Energy.

Since our 2012–13 determination, we have included an allowance for headroom of five per cent of efficient costs to facilitate and encourage competition in the large customer market in regional Queensland.

Competition in regional Queensland

While there is very limited competition in the small customer market in regional Queensland, competition in the large customer segment shows greater promise of developing further, particularly in areas where notified prices more closely reflect the actual costs of supply. Competition in this market segment can be supported by applying an appropriate level of headroom to notified prices with the aim of encouraging customers to engage in the market and seek out better offers.

The use of a headroom allowance is a generally accepted approach to stimulating competition and customer engagement in emerging competitive markets. The QPC highlighted the role that headroom plays in supporting competition in regional Queensland:

> *Evidence demonstrates that some level of headroom is needed in electricity prices to support the development of a competitive retail market. Competition is already in effect in certain customer segments in regional Queensland. The number of large and very large customers on market contracts is a direct result of competitive market offers made possible through the retail headroom allowance. Removing the headroom component of notified prices for regional customers would effectively preclude any further development of regional competition. It also would raise issues around customers who have already taken up market offers.*[70]

[70] QPC 2016, *Electricity pricing inquiry*, draft report, 3 February 2016, p. 159.

How much headroom should be included?

It is difficult to assess the impact of more cost-reflective notified prices and the inclusion of headroom on competition. There has only been a small increase in the proportion of large regional customers on market contracts over the last few years. As at 30 June 2015, around 28 per cent of large regional customers were supplied under a market contract.

However, in the Ergon Distribution east pricing zone, transmission region one—where notified prices are based on the estimated efficient costs of supply—the proportion of large customers on market contracts is higher and has been increasing. In 2012–13, around 44 per cent of large customers in this area were on market contracts; that number has increased to 47 per cent as of June 2015. Notwithstanding this increase, some barriers to the development of widespread competition in the regional large customer market remain:

- Setting uniform retail tariffs means that customers in higher-cost areas of regional Queensland are not paying cost-reflective notified prices and very large customers are paying a notified price based on a network charge for high-voltage demand customers (rather than their site-specific network charge).
- Many customers are still accessing obsolete and transitional tariffs, which are not cost-reflective.
- Once customers accept a market contract with a second tier retailer, they are not allowed to return to Ergon Retail, which may discourage them from accepting a market offer.[71]

Even if headroom is set at a reasonable level, these barriers will likely continue to limit the extent to which competition develops throughout regional Queensland in the foreseeable future. However, we consider that it is appropriate to continue to include an allowance for headroom so that the level of notified prices does not create a barrier to competition—to the extent possible—and to encourage customers to engage with the market and actively seek out better offers.

QCA position

In the absence of any further information, or compelling reasons to change the level of headroom, our final decision is to continue to include an allowance for headroom in notified prices for large and very large business customers and to maintain the allowance at five per cent of total costs.

6.2 Cost pass-through mechanism

Cost pass-through mechanisms are used by regulators to mitigate the risk that the costs allowed for in regulated prices are higher or lower than actual efficient costs. Cost pass-through mechanisms are usually restricted to events that are outside the control of the regulated entity.

Consistent with the Government's stated intent of the UTP, our final decision is to continue to base notified prices for residential and small business customers on the costs of supply in south east Queensland. Not allowing a true-up of costs resulting from events that are outside retailers' control may result in notified prices being out of alignment with south east Queensland costs, which could deviate from the intent of the UTP.

We applied a cost pass-through mechanism for the first time in our 2014–15 determination to pass through an under-recovery of costs in 2013–14 associated with the SRES. We also decided

[71] This restriction also applies to any future occupants of that premises (e.g. if the premises is sold or occupied by a new tenant).

that the mechanism could be used to account for material differences in network charges, in the event that the charges billed to retailers (usually the AER-approved charges) differed from those used to set notified prices. However, this application of the mechanism has not been needed to date.

In the draft determination, we proposed to consider passing through differences in SRES costs, where the costs provided in the 2015–16 determination were under- or overstated as a result of differences between the non-binding and binding small-scale technology percentage (STP) for 2016. The approach to calculating SRES costs is set out in detail in Section 4.2.1 and in ACIL's report on estimating energy costs.

Ergon Retail and Origin Energy supported the continued use of the pass-through mechanism for differences in SRES costs. No other stakeholders commented on this issue.

Pass through of SRES costs incurred in 2015–16

As discussed in Section 4.2.1, a retailer's SRES liabilities are determined by the STP, which is the prescribed value that retailers use to determine the number of small-scale technology certificates (STCs) they must surrender to discharge their SRES liabilities. The STP is set by the Clean Energy Regulator (CER) and changes from year to year.

Retailers incur SRES liabilities for each calendar year, but notified prices are determined for each financial year. While the binding STP for the first and second quarters of the prospective financial year is known when setting notified prices, the binding STP for the third and fourth quarters is not. To overcome this, ACIL estimates SRES costs using the average of the final STP (for the first two quarters of the financial year) and the preliminary or 'non-binding' STP (for the last two quarters of the financial year). Where the final STP for the last two quarters turns out to be different from the non-binding STP, the SRES allowance provided through notified prices may under- or overcompensate retailers operating in south east Queensland for their actual SRES liabilities during a financial year.

Based on the binding STP for 2016, retailers with customers on non-market contracts are likely to have over-recovered the costs of complying with the SRES in 2015–16. This is because the binding STP target for the second half of 2015–16 of 9.68 per cent, was lower than the non-binding target of 9.98 per cent, which was used for setting notified prices in 2015–16.

We estimate that returning these over-recovered SRES costs to customers would reduce the usage charge for residential and small business tariffs by approximately 0.008 c/kWh (including the application of the losses, retail margin and headroom that applied in 2015–16). The calculation of the SRES pass-through amount is set out in more detail in Appendix K. Table 13 presents our assessment of the 2015–16 over-recovered amounts.

Table 13 Total SRES over-recoveries in 2015–16

Settlement class	*Retail tariff*	*SRES over-recovery (c/kWh)*
Energex NSLP – Residential, small business, unmetered supply and controlled loads	11, 12A, 14, 20, 22, 22A, 24, 41, 91, 31 and 33	0.0077
Ergon Energy – NSLP - SAC demand and street lighting	44, 45, 46, 50, 71	0.0081
Ergon Energy – NSLP - SAC HV, CAC and ICC	47, 48	0.0077

***a**. Includes allowances for losses, margin and headroom recovered in 2015–16.*

QCA position

Our final decision is to require the negative pass-through of a small over-recovery of 2015–16 SRES costs into 2016–17 notified prices, as set out in Table 13 above.

Although these are relatively small amounts, we consider this pass-through is appropriate given that the QCA's intent for the pass-through mechanism has always been for it to operate symmetrically. It also ensures that notified prices are aligned with south east Queensland costs, which is consistent with the intent of the UTP.

We have previously considered the cost pass-through mechanism could be used to account for differences in network charges. However, as the final 2015–16 network charges billed to retailers did not differ from those used to set 2015–16 notified prices, no adjustment is required.

Depending on the regulatory framework that will apply to future price determinations, and whether any changes are made to the UTP or the subsidy arrangements underpinning it, the pass-through provisions discussed here may or may not remain appropriate in the future. Therefore, the QCA cannot commit to the continued availability of a cost pass-through mechanism beyond this price determination.

7 TRANSITIONAL ARRANGEMENTS

The delegation requires that we consider maintaining transitional arrangements for tariffs classed as transitional or obsolete, which include farming and irrigation tariffs.

For the 2016–17 tariff year, we have decided to:

- *maintain the transitional arrangements for tariffs classed as transitional or obsolete because there would be significant price impacts for some customers moving to standard business tariffs*
- *continue to allow all customers access to transitional tariffs*
- *increase transitional and obsolete tariffs in line with increases in standard business tariffs, and apply an escalation factor of 1.1 to limit charges for transitional and obsolete tariffs from falling further below cost in dollar terms.*

7.1 Transitional arrangements for obsolete and transitional tariffs

Since 2012–13 the QCA has set notified prices based on a network plus retail costs (N+R) approach. The introduction of this approach meant that a number of existing retail tariffs did not align with a network tariff. These included farming and irrigation tariffs.[72]

In previous determinations, we decided that most of these tariffs should continue to be available for a transitional period before customers are required to move to standard business tariffs because some customers would face significant financial impacts if they moved to a standard business tariff immediately.

The delegation requires that we consider maintaining these transitional arrangements and continuing to allow all customers access to transitional tariffs. Canegrowers and Cotton Australia supported retaining transitional and obsolete tariffs.

QCA position

We have decided to maintain transitional arrangements for 2016–17. We consider it appropriate to maintain these arrangements, as analysis from Ergon Retail (see Appendix E) shows that, while a significant number of customers on transitional and obsolete tariffs may face lower electricity bills on standard business tariffs, some customers are paying electricity bills significantly below their cost of supply and would face significant price impacts if they immediately moved to the standard business tariffs paid by other businesses in regional Queensland.

7.1.1 Transitional periods

We established transitional periods for each transitional and obsolete tariff in our 2013–14 determination. In subsequent determinations we decided to maintain these periods. Tariffs 20 (large), 21, 22 (small and large), 37, 62, 65 and 66 were made available until 2020 to allow time

[72] We note that the QPC is examining issues around transitional and obsolete tariffs as part of its electricity pricing inquiry, and has made a draft recommendation for the government to develop an industry assistance arrangement to help businesses on transitional and obsolete tariffs to adjust to standard business tariffs. See www.qpc.qld.gov.au for further information on the QPC's electricity inquiry.

for businesses to prepare for the transition to standard business tariffs and recoup some of the value of investments made to suit the level and structure of these tariffs.[73]

Toowoomba Regional Council supported allowing transitional periods to run their full course to allow customers to continue to explore options to adapt their operations to standard business tariffs. Cotton Australia and the QFF did not support transitional and obsolete tariffs being removed in 2020, with Cotton Australia arguing for transitional tariffs to remain available to existing customers indefinitely. Cotton Australia highlighted that electricity costs for some of their members would triple if they were to move to standard business tariffs. The QFF had reservations about the removal of transitional arrangements in 2020, as it considered farmers were poorly informed about the transition to new tariffs and there was no transitional program to assist them.

QCA position

We have decided to maintain the existing transitional periods, established in our 2013–14 final determination. We consider this will provide certainty to businesses and allow them to prepare for moving to standard business tariffs. We do not propose to remove transitional tariffs earlier than scheduled as, based on customer impact analysis (see Appendix E), some customers would experience significant price impacts if they moved to a standard business tariff immediately.

We have decided not to extend existing transitional periods beyond 2020 for two reasons. Firstly, as explained in previous determinations, we decided on the transitional period by using the Australian Taxation Office's defined depreciable life of an irrigation pump of 12 years as a starting point and then reducing it, because we considered that most investments of this type would have already been partly, if not fully, depreciated. Secondly, indefinitely subsidising prices beyond already subsidised UTP levels will encourage further uneconomic investment by businesses and networks.

7.1.2 Access to obsolete tariffs

The delegation requires that we consider continuing to allow all customers access to transitional tariffs.

In the 2013–14 determination, we decided that all business customers should have access to transitional tariffs throughout the transitional period, subject to individual tariff terms and conditions. The transitional tariffs are tariffs 20 (large), 21, 22 (small and large), 62, 65, and 66.[74] We made this decision so that all businesses could be treated equitably. In subsequent determinations, we noted that we would consider closing access to transitional tariffs to new customers if there was a significant increase in the number of customers accessing transitional tariffs, and thereby an increase in the subsidy paid by taxpayers. However, as we found no significant increase, we decided to continue to allow open access.

Origin suggested that access to transitional tariffs should only be available to those customers who have made investments on the expectation that these tariffs would remain. Cotton Australia supported transitional tariffs being available to existing customers on transitional tariffs.

[73] Tariffs 41 (large) and 43 (large) were made available until 30 June 2015, on the basis that a significant number of customers would be better off on a standard business tariff.

[74] New customers cannot access tariffs classified as obsolete. We made this decision on the basis that they had been obsolete for some time (tariff 37), or that they would be removed in a shorter timeframe (tariffs 41 (large) and 43 (large), which were removed on 30 June 2015).

QCA position

We have decided to continue to allow all business customers to have access to transitional tariffs. Our analysis shows that there has not been a significant increase in the number of customers accessing transitional tariffs. We consider that limiting transitional tariff access to customers based on their expectations at the time of making their investments, as suggested by Origin, would not be equitable and may prevent customers from moving to a standard business tariff.

7.1.3 Escalation of transitional and obsolete tariffs

Transitional and obsolete tariff charges, unlike other tariffs, are not determined using an N+R approach. In past determinations, our general approach to setting charges for each transitional and obsolete tariff was to escalate the charges based on the percentage increase in the charges in the standard business tariff that customers would otherwise pay. We then applied additional escalation factors to these increases to limit charges for transitional and obsolete tariffs falling further below cost in dollar terms.[75] Escalation factors of 1.1, 1.25 or 1.5 were applied, depending on the gap between customer bills under transitional and obsolete tariffs, and corresponding standard business tariffs. Where most customer bills would likely be impacted by 10 per cent or less, an escalation factor of 1.1 was applied; where impacts were between 10 per cent and 100 per cent, an escalation factor of 1.25 was applied; and where impacts exceeded 100 per cent, an escalation factor of 1.5 was applied.

In the 2015–16 determination, the charges in standard business tariffs fell slightly. We determined that maintaining charges in transitional and obsolete tariffs at their 2014–15 levels would be sufficient to limit these charges from falling further below cost in dollar terms.

Bundaberg Regional Irrigators Group, Canegrowers and Canegrowers Isis highlighted the impact of significant price increases in previous years on their members' operations. Canegrowers stated increases in transitional tariffs would exacerbate what they consider to be an already unsustainable regulated price structure. Canegrowers Isis highlighted that a recent study had shown that it was more economical to run a diesel irrigation pump than an electric pump on tariff 22A.

Canegrowers and Cotton Australia stated that further increases in transitional tariffs were unjustified. Canegrowers and Pioneer Cane Growers Organisation (PCGO) disputed that irrigation tariffs (tariffs 62, 65 and 66) were below cost. PCGO argued that, as a number of irrigators may pay less on tariff 20 or 22A, escalation factors were not warranted. Cotton Australia opposed the escalation of transitional tariffs.

QCA position

We have decided to increase transitional and obsolete tariffs in line with increases in standard business tariffs, and apply an escalation factor of 1.1 to limit charges for transitional and obsolete tariffs falling further below cost in dollar terms.

Table 14 maps transitional and obsolete tariffs to small and large customer tariffs and shows the percentage increase in the standard business tariffs in 2016–17. Unlike previous determinations, we have used only small business tariff 20 as the basis for escalating small customer transitional tariffs 21, 62, 65 and 66, rather than the combination of tariff 20 and tariff 22. This is because

[75] As any given percentage increase in a higher (such as a standard business tariff) bill will be greater in dollar terms than the same percentage increase in a smaller (such as a transitional or obsolete tariff) bill. For example, if two bills of $1,000 and $2,000 each increased by 10% to $1,100 and $2,200 respectively, the dollar difference between the two bills would increase from $1,000 to $1,100.

tariff 22 is no longer suitable as a benchmark, as it is now an obsolete tariff which customers on transitional tariffs are not able to access. While small business customers on obsolete and transitional tariffs also have access to a seasonal time-of-use tariff, tariff 22A, we also do not consider this to be an appropriate benchmark, as charges under this tariff are adjusted by the QCA based on the price level of tariff 20.[76]

Table 14 Alignment of tariffs and underlying cost increases

Standard business tariff	***Standard business tariff annual bill increase***	***Transitional or obsolete tariff***
Tariff 20	11.2%	Tariffs 21, 62, 65, 66
Tariffs 44–46[a]	12.0%[b]	Tariffs 20 (large), 22 (small and large), 37[c]

a *The most appropriate tariff depends on the customer's demand and voltage requirements.*

b *This is the average of typical customer bill increases across tariffs 44, 45 and 46. Tariffs 47 and 48 are omitted because only a very small number of customers are on these tariffs, which may skew the results.*

c *Small customers on tariff 37 will most likely move to tariff 20 or 22A; however, as most customers on this tariff are large, it is aligned with the large customer tariffs for this purpose.*

Table 15 summarises the likely percentage impacts on electricity bills for customers on each transitional and obsolete tariff moving to an equivalent standard business tariff (see Appendix E for further details). Applying escalation factors consistent with previous determinations would result in the QCA applying escalation factors of 1.25 or 1.5 to 2016–17 standard business tariff increases for most transitional and obsolete tariffs.[77]

[76] See Chapter 3.

[77] Tariffs 62 and 65 would have an escalation factor of 1.1 under the approach in previous determinations.

Table 15 Likely impact on electricity bills for customers on transitional and obsolete tariffs moving to equivalent standard business tariffs in 2015–16

Transitional tariff	*Standard business tariff*	*Percentage of customers who would experience reduced bills*	*Percentage of customers who would experience less than 10% increase in bills*	*Percentage of customers who would experience 10% to 100% increase in bills*	*Percentage of customers who would experience greater than 100% increase in bills*
Tariff 20 (large)	Tariff 44 to 46[a]	8.2%	18.6%	73.2%	0.0%
Tariff 21	Tariff 20	7.0%	9.0%	39.0%	45.0%
Tariff 22 (large)	Tariff 44 to 46[a]	2.3%	5.8%	91.9%	0.0%
Tariff 37	Tariff 20	11.5%	45.5%	39.0%	4.0%
	Tariff 22A	59.5%	24.0%	13.0%	3.5%
	Tariff 44 to 46[a]	0.0%	0.0%	100.0%	0.0%
Tariff 62	Tariff 20	29.0%	16.6%	53.8%	0.6%
	Tariff 22A	36.2%	13.4%	48.2%	2.2%
	Tariff 44 to 46[a]	2.1%	4.1%	93.8%	0.0%
Tariff 65	Tariff 20	38.9%	20.8%	40.0%	0.3%
	Tariff 22A	61.7%	12.2%	24.9%	1.2%
	Tariff 44 to 46[a]	0.0%	1.6%	98.4%	0.0%
Tariff 66	Tariff 20	50.5%	20.3%	29.2%	0.0%
	Tariff 22A	73.0%	19.1%	7.8%	0.1%
	Tariff 44 to 46[a]	0.0%	0.0%	100.0%	0.0%

a *Standard business tariff determined based on individual customer usage and demand levels.*

Note: Ergon Retail data applies a derived demand profile for customers where demand data is unavailable. Cost impacts may be over- or understated for individual customers depending on their unique demand profile.

Source: QCA analysis of Ergon Retail data.

We disagree with suggestions that transitional and obsolete tariffs should not be increased at all, or that escalation factors are unwarranted. As discussed above, Ergon Retail analysis shows that while a number of customers may pay lower prices on standard business tariffs, there are some customers on transitional tariffs, particularly those with higher usage levels, who pay significantly less than they would pay on standard business tariffs. As standard business tariffs are estimated to increase in 2016–17, leaving transitional and obsolete tariffs unchanged, and not applying escalation factors, would result in charges for most of these customers falling further below cost. This would risk encouraging further uneconomic investment, and leaving customers further away from standard business tariffs at the end of the transitional period.

Having said that, we acknowledge stakeholders' concerns about price increases in previous years and the impact that further price increases may have on their businesses. For this reason, we have decided not to apply the higher escalation factors of 1.25 and 1.5 used previously, and instead apply only the lower escalation factor of 1.1 to all transitional and obsolete tariffs. We note that this will result in more customers facing price increases at the end of the transitional period than if higher escalation factors were applied.

As noted by the PCGO, a number of customers on transitional tariffs, especially those with lower levels of consumption, could pay less by changing to a flat standard business tariff, like tariff 20. It is possible that some customers could also benefit from time-of-use or demand tariffs. However, we note that the need to install appropriate meters may be deterring some customers. We encourage customers on transitional tariffs to contact their retailer about options they may have to save on their electricity costs.[78]

7.2 2016–17 transitional arrangements

A summary of transitional arrangements for 2016–17 is provided in Table 16.

Table 16 Transitional arrangements for 2016–17

Obsolete or transitional tariff	*Period to be retained*	*2016–17 price increase*
Tariff 20 (large)—transitional	4 years	13.2%
Tariff 21—transitional	4 years	12.3%
Tariff 22 (small and large)—transitional	4 years	13.2%
Tariff 37—obsolete	4 years	13.2%
Tariff 62—transitional	4 years	12.3%
Tariff 65—transitional	4 years	12.3%
Tariff 66—transitional	4 years	12.3%

[78] We understand Ergon Retail wrote to around 2,000 customers in this situation to encourage them to change to standard business tariffs and lower their electricity costs. However, less than 100 of those contacted opted to do so.

8 FINAL DETERMINATION

This chapter sets out our final determination of regulated retail electricity prices (notified prices) to apply from 1 July 2016 to 30 June 2017, as well as customer impacts.

Under the network plus retail (N+R) approach, retail tariffs are aligned with network tariffs approved by the AER. For the final determination Energex and Ergon Energy have provided 2016–17 network tariffs and charges (as submitted to the AER). The network tariffs used to develop retail tariffs are discussed in Chapter 3.

Chapters 4, 5 and 6 set out our decisions on energy costs, retail costs and other costs, which comprise the R component of the retail tariff calculation.

Chapter 7 sets out our decisions on notified prices and transitional arrangements for retail tariffs that have been declared transitional or obsolete.

The regulated retail tariffs and notified prices are published in a tariff schedule, which includes other information, including the eligibility criteria and terms and conditions for each tariff. The tariff schedule for 2016–17 is provided in Appendix G.

The following tables set out our final determination of regulated retail tariffs and prices for 2016–17. All tariffs are presented exclusive of goods and services tax (GST).

Table 17 2016–17 Regulated retail tariffs and prices for residential customers (excl GST)

Retail tariff	*Fixed charge[a]*	*Usage charge (peak)*	*Usage charge (flat/off-peak)*	*Demand charge (peak)*	*Demand charge (off-peak)*
	c/day	*c/kWh*	*c/kWh*	*$/kW/mth*	*$/kW/mth*
Tariff 11 - Residential (flat rate)	89.572		24.610		
Tariff 12A - Residential (time-of-use)[b]	101.306	55.865	19.859		
Tariff 14 - Residential (time-of-use demand)[c]	60.514		14.984	61.790	11.258
Tariff 31 - Night rate (super economy)			14.423		
Tariff 33 - Controlled supply (economy)			19.960		

***a**. Charged per metering point.*

***b**. Peak – 3:00pm to 9:30pm (December, January and February); off peak - all other times.*

***c**. Peak demand – 3:00pm to 9:30pm (December, January and February); off peak demand - 3:00pm to 9:30pm (March to November).*

Table 18 2016–17 Regulated retail tariffs and prices for small business and unmetered supply customers, other than street lighting (excl GST)

Retail tariff	*Fixed charge[a]*	*Usage charge (peak)*	*Usage charge (flat/off-peak)*	*Demand charge (peak)*	*Demand charge (off-peak/flat)*
	c/day	*c/kWh*	*c/kWh*	*$/kW/mth*	*$/kW/mth*
Tariff 20 - Business (flat rate)	127.879		25.968		
Tariff 22 - Business (time-of-use) (transitional)[b]	127.879	28.229	22.648		
Tariff 22A - Business (time-of-use)[c]	127.879	47.258	23.303		
Tariff 24 - Business (time-of-use demand)[d]	78.046		16.299	84.804	13.935
Tariff 41 - Low voltage (demand)	610.984		13.615		28.841
Tariff 91 - Unmetered			23.376		

a. *Charged per metering point.*

b*. Peak - 7:00am to 9:00pm, weekdays; off-peak - all other times. This tariff is only available to customers who were supplied under Tariff 22 at 30 June 2015.*

c*. Peak - 10:00am to 8:00pm on weekdays (December, January and February); off-peak - all other times.*

d*. Peak demand - 10:00am to 8:00pm on weekdays (December, January and February); off peak demand - 10:00am to 8:00pm on weekdays (March to November).*

Table 19 2016–17 Regulated retail tariffs and prices for large business and street lighting customers (excl GST)

Retail tariff	*Fixed charge*	*Usage charge (peak)*	*Usage charge (flat/off-peak)*	*Demand charge (peak)*	*Demand charge (off-peak/flat)*
	c/day	*c/kWh*	*c/kWh*	*$/kW/mth*	*$/kW/mth*
Tariff 44 - Over 100 MWh small (demand)	5314.202		12.302		39.863
Tariff 45 - Over 100 MWh medium (demand)	16662.167		12.393		31.647
Tariff 46 - Over 100 MWh large (demand)	44351.904		12.599		28.123
Tariff 47 - High voltage (demand)	41533.203		11.567		25.896
Tariff 48 - Over 4 GWh high voltage (demand)	41969.578		11.567		25.896
Tariff 50 - Over 100 MWh seasonal time-of-use (demand)[a]	4493.324	11.832	15.266	61.203	14.761
Tariff 71 - Street lighting[b]	0.735		31.503		

***a**. Peak demand charged on maximum metered demand exceeding 20 kilowatts on weekdays between 10:00am to 8:00pm in Summer months (December, January and February). Off-peak demand charged on maximum metered demand exceeding 40 kilowatts during non-summer months (March to November). Peak usage charged on all usage in Summer months (December, January and February). Off-peak usage charged on all usage during non-summer months (March to November).*

***b**. The fixed charge for street lighting applies to each lamp.*

Table 20 2016–17 Transitional and obsolete regulated retail tariffs and prices (excl GST)

Retail tariff	*Fixed charge*	*Min Charge*	*Usage rate 1[b]*	*Usage rate 2[c]*	*Usage rate 3[d]*	*Usage rate (flat)*	*Capacity (Up to 7.5kw)*	*Capacity (Over 7.5kw)*
	c/day	*c/day*	*c/kWh*	*c/kWh*	*c/kWh*	*c/kWh*	*$/kW/yr*	*$/kW/yr*
Tariff 37[a]		28.460	20.267		50.691			
Tariff 20 (lge)	71.429					34.940		
Tariff 21		69.107	46.962	44.124	33.590			
Tariff 22	171.670		46.301		16.304			
Tariff 62	74.644		44.259	37.427	15.650			
Tariff 65	74.644		35.305		19.446			
Tariff 66	164.512					18.505	35.888	107.903

***a**. Tariff 37 became obsolete on 1 July 2007. It is only available to customers taking supply under tariff 37 on 30 June 2007.*

***b**. Tariff 21 – first 100 kWh, tariff 22 – 7am-9pm M-F, tariff 37 – 10:30pm-4:30pm, tariff 62 – 7am-9pm M-F first 10,000kWh, tariff 65 – 12hr peak.*

***c**. Tariff 21 – 101-10,000 kWh, tariff 62 – 7am-9pm M-F over 10,000kWh.*

***d**. Tariff 21 – over 10,000 kWh, tariff 22 – all other times, tariff 37 – 4:30pm-10:30pm, tariffs 62, & 65 – all other times.*

8.1 Customer impacts

Impacts on residential customers[79]

The main retail tariff for residential customers is tariff 11. Many customers on tariff 11 are also on one of the 'off-peak' or 'controlled load' tariffs (tariffs 31 and 33) for uses such as water heating and pool pumps.

In 2016–17, the annual bill for a typical customer on tariff 11 will increase by 2.8 per cent from $1,457 to $1,498. For a typical customer on a combination of tariffs 11 and 31 or tariffs 11 and 33, the increases will be slightly higher (4.8 per cent and 3.1 per cent respectively). However, the impact on individual customers will vary depending on their consumption. As Table 21 below shows, annual bills for tariff 11 customers with lower consumption than the typical customer will either decrease or increase by less than 2.8 per cent. Almost one-third of customers on tariff 11 will face lower annual bills in 2016–17 compared to 2015–16. Annual bills for tariff 11 customers with higher consumption than the typical customer will increase by more than 2.8 per cent.

Table 21 Changes in electricity bills in 2016-17 for tariff 11 customers (GST inclusive)

Description	*Annual consumption (kWh)*	*2015-16 Annual Bill ($)*	*2016-17 Annual Bill ($)*	*Changes ($)*	*Changes (%)*
25th Percentile usage[a]	2055	$931.50	$916.19	-$15.31	-1.6%
Median usage[b]	4203	$1,456.94	$1,497.67	$40.74	2.8%
75th Percentile usage[c]	6412	$1,997.30	$2,095.67	$98.37	4.9%

a *One quarter of regional Queensland customers will use less electricity than the 25th percentile customer.*

b *Half of regional Queensland customers will use less electricity than the median customer.*

c *Three quarters of regional Queensland customers will use less electricity than the 75th percentile customer.*

Note: 25th percentile, median and 75th percentile usage data for regional Queensland customers are supplied by Ergon Retail, who calculate these figures based on all their customers on the stated tariff(s). See Appendix H for more information. Totals may not add up due to rounding.

The increase in typical tariff 11 customer bills is primarily due to higher energy costs. Our consultant, ACIL, advised that the rise in energy costs is driven largely by increasing demand from liquefied natural gas plants, and higher Renewable Energy Target costs. Some of the impact of higher energy costs has been offset by a decrease in network costs. For lower consumption customers, the outcome of the review of retail costs has also helped to offset the impacts of higher energy costs as it has reduced the level of fixed retail costs.

[79] The bill impacts presented are based on typical levels of consumption. The typical customer data was supplied by Ergon Retail and represents the median customer for all customers on the stated tariff. See Appendix H for further information. Please note that the annual bill amounts in Figure 12 have been rounded to the closest dollar.

Figure 12 Annual bills for typical residential customers (GST inclusive)

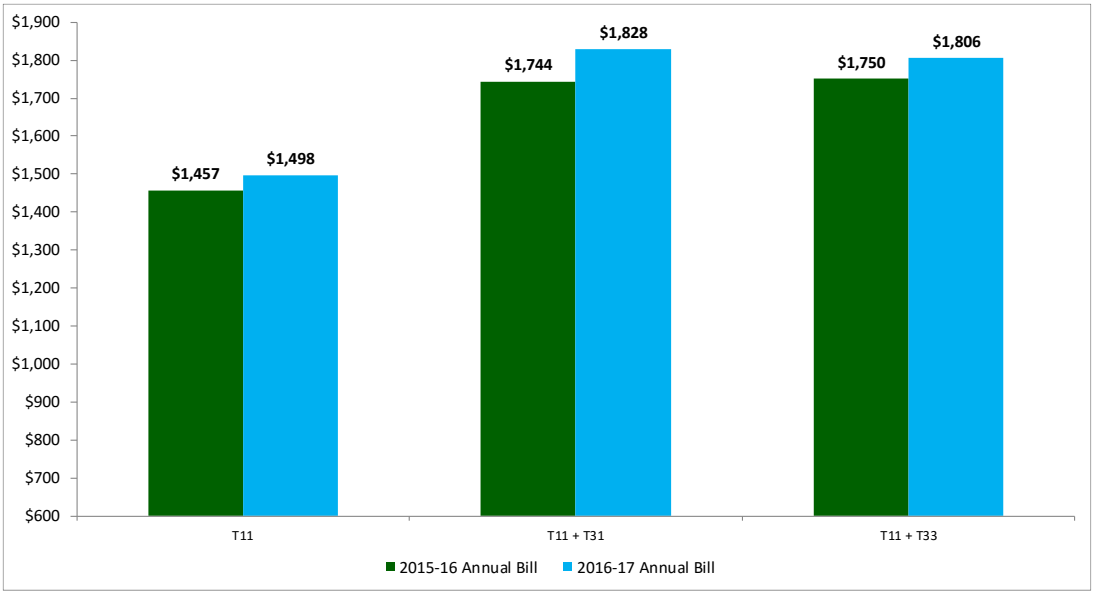


Table 22 Tariff 11 charges (GST exclusive)

	2015–16 Final Determination	*2016–17 Final Determination*	*Change (%)*
Fixed charge (cents/day)	106.728	89.572	-16.1%
Variable charge (cents/kWh)	22.238	24.610	10.7%

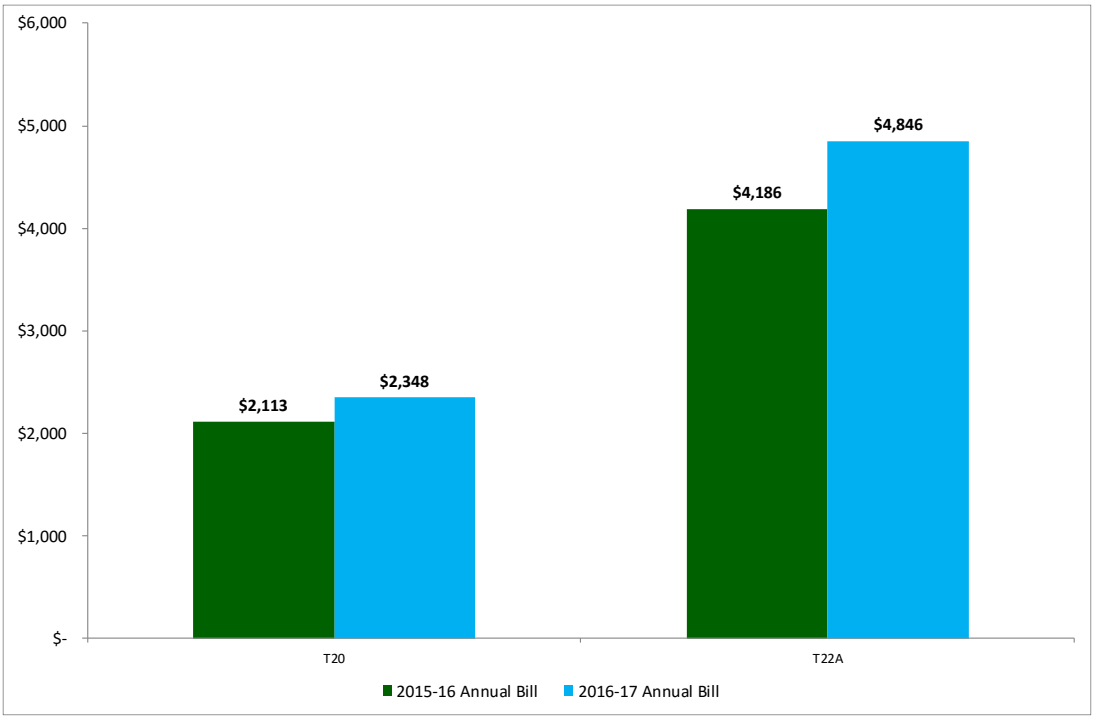
Impacts on small business customers[80]

In 2016–17, typical customers on the main small business tariff (tariff 20) will face an increase of $236[81] or 11.2 per cent in their annual bill. Typical small business customers on the seasonal time-of-use tariff (tariff 22A) will face an increase of $660 or 15.8 per cent. These increases have been driven primarily by higher energy costs and retail costs. Bill impacts will vary depending on each individual customer's level and pattern of consumption.

[80] The bill impacts presented are based on typical levels and patterns of consumption. The typical customer data is supplied by Ergon Retail and represents the median customer for all customers on the stated tariff. See Appendix H for further information.

[81] Please note that this figure does not equal the difference between the annual bill amounts for tariff 20 in Figure 13 ($235), due to rounding of the amounts in Figure 13.

Figure 13 Annual bills for typical small business customers (GST inclusive)

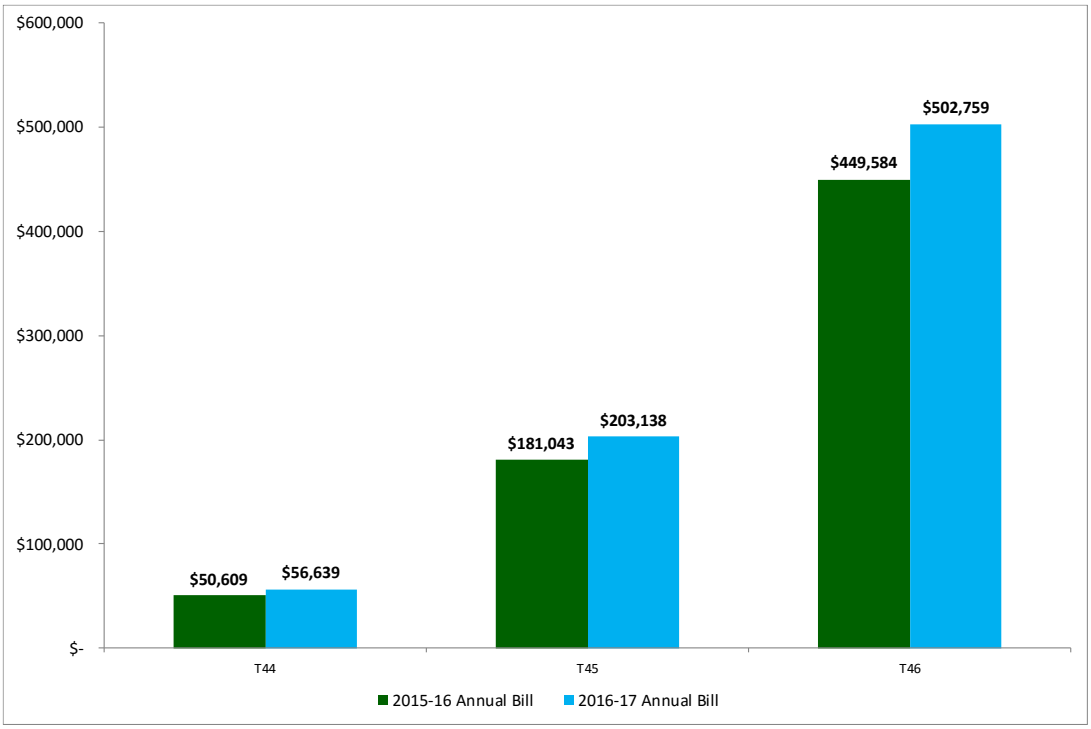


Impacts on large business customers[82]

In 2016–17, typical large business customers will face increases in their annual bills of between 11.8 per cent and 12.2 per cent. The increases have been driven primarily by higher energy costs and network costs. Bill impacts will vary depending on each individual customer's level and pattern of consumption.

[82] The bill impacts presented are based on typical levels and patterns of consumption. The typical customer data was supplied by Ergon Retail and represents the median customer for all customers on the stated tariff. See Appendix H for further information. Please note that the annual bill amounts in Figure 14 have been rounded to the closest dollar.

Figure 14 Annual bills for typical large business customers (GST inclusive)



Arrangements for customers on obsolete and transitional tariffs

Some business customers are supplied under transitional or obsolete tariffs, which include farming and irrigation tariffs. These tariffs have been made available for several years to allow customers to transition to standard business tariffs and recoup some of the investments made to suit the level and structure of transitional or obsolete tariffs. Based on information from Ergon Retail, many customers on these tariffs may face lower electricity bills if they moved to a standard business tariff, but some customers would face much higher bills.

We have maintained transitional arrangements for 2016–17. Our general approach in past determinations has been to increase the charges in each transitional and obsolete tariff in line with the percentage increases in the standard business tariffs customers would otherwise pay. We have then generally applied an additional escalation factor to limit charges for transitional and obsolete tariffs falling further below cost in dollar terms.

Standard business tariffs will increase in 2016–17 so transitional and obsolete tariffs will also need to increase. Under our general approach in previous determinations, the escalation factors for most of these tariffs in 2016–17 would be 1.25 or 1.5.

However, given the substantial price increases that customers on transitional and obsolete tariffs have experienced in recent years and that customers on these tariffs are more than halfway through the transition to standard business tariffs, we have decided to apply the minimum escalation factor of 1.1. This means customers on these tariffs will face increases of between 12.3 per cent and 13.2 per cent in 2016–17 rather than up to 16.8 per cent if the higher escalation factors were applied.

New customers will also continue to be allowed to access transitional tariffs.

Table 23 Transitional arrangements for 2016–17

Obsolete or transitional tariff	*Period to be retained*	*2016–17 price increase*
Tariff 20 (large) –transitional	4 years	13.2%
Tariff 21–transitional	4 years	12.3%
Tariff 22 (small and large) –transitional	4 years	13.2%
Tariff 37–obsolete	4 years	13.2%
Tariff 62–transitional	4 years	12.3%
Tariff 65–transitional	4 years	12.3%
Tariff 66–transitional	4 years	12.3%

ACRONYMS

A	
AEMC	Australian Energy Market Commission
AEMO	Australian Energy Market Operator
AER	Australian Energy Regulator
AFMA	Australian Financial Markets Association
B	
BRCI	Benchmark Retail Cost Index
C	
CARC	Customer acquisition and retention costs
CPI	Consumer Price Index
c/day	cents per day
E	
Ergon Distribution	Ergon Energy Corporation Limited (electricity distribution arm)
Ergon Retail	Ergon Energy Queensland (electricity retail arm)
Electricity Act	*Electricity Act 1994* (Qld)
G	
GST	Goods and services tax
GWh	Gigawatt hour
Government	Queensland Government
I	
IPART	Independent Pricing and Regulatory Tribunal
J	
K	
kWh	Kilowatt hour
kVA	Kilovolt Ampere
L	
LGC	Large-scale generation certificate
LNG	Liquefied natural gas
LRET	Large-scale Renewable Energy Target
M	
Minister	Minister for Energy and Water Supply
MWh	Megawatt hour

N	
N	Network costs
NECF	National Energy Customer Framework
NEM	National Electricity Market
Notified prices	Regulated retail electricity prices
NSLP	Net System Load Profile
N + R	Network + Retail cost build-up methodology
NSW	New South Wales
O	
Origin	Origin Energy
Q	
QCA	Queensland Competition Authority
QCOSS	Queensland Council of Social Services
QPC	Queensland Productivity Commission
R	
R	Energy and retail cost
RET	Renewable Energy Target
ROC	Retail operating costs
RPP	Renewable power percentage
S	
SAC	Standard Asset Customer
SBS	Solar Bonus Scheme
SRES	Small-scale Renewable Energy Scheme
STC	Small-scale technology certificate
STP	Small-scale technology percentage
T	
TWh	Terawatt hour
U	
UTP	Uniform Tariff Policy

APPENDIX A: MINISTERIAL DELEGATION AND COVER LETTER

Queensland Government

Minister for Main Roads, Road Safety and Ports
Minister for Energy and Water Supply

Our Reference: CTS 27888/15

30 NOV 2015

Level 15 Capital Hill Building
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Queensland 4001 Australia
Telephone +61 7 3719 7300
Facsimile +61 7 3224 2493
Email mainroads@ministerial.qld.gov.au
Website www.tmr.qld.gov.au

Professor Roy Green
Chair
Queensland Competition Authority
Level 27, 145 Ann Street
BRISBANE QLD 4000

Dear Professor Green

Re: Regulated Retail Electricity Prices 2016-17

I write to you to issue a Delegation and Terms of Reference to the Queensland Competition Authority (QCA) for the determination of regulated retail electricity prices for 2016-17 under Section 90AA(1) of the *Electricity Act 1994*.

As you will be aware, the Government made a decision to delay the introduction of price deregulation in South East Queensland (SEQ). While the Government has requested that the Queensland Productivity Commission (QPC) assess the costs and benefits of deregulation as part of its Electricity Pricing Inquiry, without further legislative changes, deregulation of retail electricity prices in SEQ will occur from 1 July 2016. As a result, this delegation applies to retail electricity prices for customers in regional Queensland only.

Given this delegation applies only to regional Queensland, considerations regarding the Uniform Tariff Policy (UTP) and competition in regional Queensland are important. I note that these issues are also under active investigation by the QPC. The Government is committed to maintaining the UTP and will not be considering any options to improve the current arrangements until we have addressed any recommendations from the QPC. The Terms of Reference, therefore, reflects a consistent approach to my delegation for 2015–16.

The removal of price regulation for small customers in SEQ removes a reference point for the determination of prices in regional Queensland. In order to maintain consistency with the regulation of prices in previous years, the Government considers that regulated prices in regional Queensland for small customers should broadly reflect the expected prices for customers on standing offers in SEQ.

Page 1 of 2

Public consultation is a vital part of the QCA's process for determining retail electricity prices and I understand this delegation has been issued later than would normally be the case. As such, the Terms of Reference seeks for the Draft Determination to be issued by 25 March 2016. I trust this provides sufficient time to undertake the necessary consultation to support the Draft Determination and to allow for the Final Determination to be delivered by 31 May 2016.

Yours sincerely

Mark Bailey MP
Minister for Main Roads, Road Safety and Ports and
Minister for Energy and Water Supply

Att: Delegation and Terms of Reference – Determination of Regulated Retail Electricity Prices for 2016-17

ELECTRICITY ACT 1994
Section 90AA(1)

DELEGATION

I, Mark Bailey, the Minister for Energy and Water Supply, in accordance with the power of delegation in section 90AA(1) of the *Electricity Act 1994* (the Act), delegate to the Queensland Competition Authority (QCA) the function under section 90(1) of the Act of deciding the prices that a retail entity may charge its non-market customers for customer retail services in the Ergon Energy Corporation Limited (EECL) distribution area for the tariff year 1 July 2016 to 30 June 2017.

The following are the Terms of Reference of the price determination:

Terms of Reference

1. These Terms of Reference apply for the tariff year 1 July 2016 to 30 June 2017.

2. The QCA is to calculate the notified prices and publish an annual price determination, in the form of a tariff schedule, in accordance with these Terms of Reference.

3. In accordance with section 90(5)(a) of the Act, in making a price determination for each tariff year QCA must have regard to the matters set out in paragraph 5 of these Terms of Reference.

4. In accordance with section 90(5)(b) of the Act, QCA may have regard to any other matter that QCA considers relevant.

5. The matters that QCA is required by this delegation to consider are:

   (a) Without further legislative change, from 1 July 2016, price regulation in the Energex distribution area will be removed for small customers. This will mean that notified prices will only apply to customers in the EECL distribution area;

   (b) Uniform Tariff Policy - QCA must consider the Government's Uniform Tariff Policy, which provides that, wherever possible, non-market customers of the same class should pay no more for their electricity, regardless of their geographic location;

   (c) Framework - QCA must use the Network (N) plus Retail (R) cost build-up methodology when working out the notified prices and making the price determination, where N (network cost) is treated as a pass-through and R (energy and retail cost) is determined by QCA;

(d) When determining the N components for each regulated retail tariff, QCA must consider the following:

(i) For residential and small business customer tariffs (with the exception of Tariffs 12A, 14, 22A and 24) - basing the network cost component on the network charges to be levied by Energex and the relevant Energex tariff structures;

(ii) For Tariff 12A (residential time-of-use), Tariff 14 (residential seasonal time-of-use), Tariff 22A (small business time-of-use tariff) and Tariff 24 (business seasonal time-of-use demand) - basing the network cost component on the price level of network charges to be levied by Energex, but utilising the relevant EECL tariff structures, in order to strengthen or enhance the underlying network price signals and encourage customers to switch to time-of-use and demand tariffs and reduce their energy consumption during peak times; and

(iii) For large business customers in who consume 100MWh or more per annum - basing the network cost component on the network charges to be levied by EECL.

(e) Transitional Arrangements - QCA must consider:

(i) maintaining transitional arrangements for tariffs classed as transitional or obsolete (i.e. farming, irrigation, declining block, non-domestic heating and large business customer tariffs), and

(ii) continuing to allow all EECL customers access to tariffs designated as transitional in 2013-14.

Interim Consultation Paper

6. QCA must publish an interim consultation paper identifying key issues to be considered when calculating the N and R components of each regulated retail electricity tariff and transitioning relevant retail tariffs.

7. QCA must publish a written notice inviting submissions about the interim consultation paper. The notice must state a period during which anyone can make written submissions to QCA about issues relevant to the price determination.

8. QCA must consider any submissions received within the consultation period and make them available to the public, subject to normal confidentiality considerations.

Consultation Timetable

9. QCA must publish an annual consultation timetable within two weeks after submissions on the interim consultation paper are due, which can be revised at the discretion of QCA, detailing any proposed additional public papers and workshops that QCA considers would assist the consultation process.

Workshops and additional consultation

10. As part of the interim consultation paper and in consideration of submissions in response to the interim consultation paper the QCA must consider the merits of additional public consultation (workshops and papers) on identified key issues.

Draft Price Determination

11. QCA must investigate and publish its draft price determination on regulated retail electricity tariffs, with each tariff to be presented as a bundled price.

12. QCA must publish a written notice inviting submissions about the draft price determination. The notice must state a period during which anyone can make written submissions to QCA about issues relevant to the draft price determination.

13. QCA must consider any submissions received within the consultation period and make them available to the public, subject to normal confidentiality considerations.

Final Price Determination

14. QCA must investigate and publish its final price determination on regulated retail electricity tariffs, with each tariff to be presented as a bundled price, and gazette the bundled retail tariffs.

Timing

15. QCA must make its reports available to the public and, at a minimum, publicly release the papers and price determinations listed in paragraphs 6 to 14.

16. QCA must publish the interim consultation paper for the 2016-17 tariff year no later than one month after the date of this Delegation.

17. QCA must publish the draft price determination on regulated retail electricity tariffs no later than 25 March 2016.

18. QCA must publish the final price determination on regulated retail electricity tariffs for the 2016-17 tariff year, and have the bundled retail tariffs gazetted, no later than 31 May 2016.

DELEGATION TO QCA

DATED this 30 day of November 2015.

SIGNED by the Honourable)
Mark Bailey,)
Minister for Energy and Water Supply) 
(signature)

APPENDIX B: SUBMISSIONS

Submissions to the interim consultation paper

Organisation

- Bundaberg Regional Irrigators Group
- Canegrowers
- Canegrowers Isis
- Cotton Australia
- Ergon Energy Corporation Ltd
- Ergon Energy Queensland Pty Ltd
- Master Electricians Australia
- Origin Energy
- Queensland Consumers' Association
- Queensland Council of Social Services
- Queensland Farmers' Federation
- Toowoomba Regional Council

Submissions to the draft determination

Organisation

- AFL Cairns
- Australian Chocolate Pty Ltd
- Australians in Retirement
- Axiom A1 Advice Services
- Banora International Group
- Big4 Atherton Woodlands Tourist Park
- Birdwing Business Solutions
- Blazing Saddles
- Blenners Transport
- Cairns Chamber of Commerce
- Cairns Coconut Holiday Resort (G Olholm)
- Cairns Coconut Holiday Resort (K Thomas)
- Cairns Hockey Association
- Cairns Tropical Gardens
- Canegrowers
- Canegrowers Isis
- Chamber of Commerce and Industry Queensland
- Coffee Bean Estate
- COTA Queensland
- Coral Coast Catering
- Cotton Australia
- D Hyde
- D Simpson
- Eaglerider Cairns
- Energy Guru
- Ergon Energy Corporation Limited (Ergon Distribution)
- Ergon Energy Queensland (Ergon Retail)
- Expressway Signs and Printworks
- Far North Queensland Electricity Users Network
- Future Investment Group
- Genesis Engineering (NQ) Pty Ltd
- Golden Boat Chinese Restaurant
- Gordon Gould Ipson Architects
- H Crossley
- Independent Capital Advisers
- Kurrimine Beach Holiday Park
- Local Government Association of Queensland
- M Avolio
- M Kitchen
- Minister for Energy and Water Supply
- Missing Link Pty Ltd
- Mission Beach Dive - Mission Beach Dunk Island Water Taxi
- Moeba
- Mt Ruby Station
- Mungalli Falls Outdoor Education Centre
- Natural Resource Assessments Pty Ltd
- NQ Exhibitions
- Oriental and Gourmet Store
- Origin Energy
- Pioneer Cane Growers Organisation Limited
- Primo Produce
- QCOSS
- Queensland Consumers Association
- Queensland Farmers Federation
- Sanreef Pty Ltd
- Sarayi Boutique Hotel
- Savannah Productions
- Sunshine Day Care Centre
- T Bowater
- T Buzolich
- The Jade Cosmetic Clinic
- The Reef Retreat - Palm Cove
- Thirkell Consulting Engineers
- Townsville City Council
- Union Jack Hotel
- Warrawong Lodge
- Wavelength Reef Cruises
- Worklife Directions
- Confidential submission

APPENDIX C: RESPONSES TO ADDITIONAL ISSUES RAISED IN SUBMISSIONS

In this section we provide responses to a number of additional issues raised in submissions, which were not addressed in our final decision.

Issue	*Stakeholder*	*QCA position*
The QCA has not complied with monopoly investigation provisions of the *Queensland Competition Authority Act 1997* (QCA Act), including having regard to social welfare and equity considerations and economic and regional development issues.	Australians in Retirement FNQEUN	The QCA determines notified prices under the Electricity Act. The monopoly investigation provisions of the QCA Act referred to in submissions do not apply when the QCA is determining notified prices.
Specific network tariffs should be introduced to cater for food and fibre producers.	Bundaberg Regional Irrigators Group Canegrowers	The QCA has no role in setting network tariffs. Network tariffs are established by distributors and approved by the Australian Energy Regulator (AER). The Queensland Productivity Commission (QPC) is conducting an inquiry into electricity pricing and will make recommendations to the Queensland Government on a range of electricity issues, including those relevant to agricultural customers. Further information can be found on the QPC's website.[83]
The QCA should recommend the regulated asset base of distributors be revalued.	Bundaberg Regional Irrigators Group	The QCA has no role in determining distributor regulated asset bases. This issue is a matter for the AER and the distribution businesses. The QPC is conducting an inquiry into electricity pricing and will make recommendations to the Queensland Government on a range of electricity issues, including on network costs. Further information can be found on the QPC's website.[84]
The QCA should recommend the solar feed-in tariff be funded out of general government revenue.	Bundaberg Regional Irrigators Group Canegrowers	The QCA has no role in determining how the solar bonus scheme is funded. This is a matter for the Queensland Government and distribution businesses. We note that the QPC is conducting inquiries into electricity pricing and solar feed-in pricing and will make recommendations to the Queensland Government on a range of issues around solar and its impact on other electricity users. Further information can be found on the QPC's website.[85]

[83] http://www.qpc.qld.gov.au/.
[84] http://www.qpc.qld.gov.au/.
[85] http://www.qpc.qld.gov.au/.

The QCA should investigate the impact of Queensland energy companies gaming the system to maximise their profitability, and adjust all energy cost estimates to compensate for reported generator rebidding behaviour.	Bundaberg Regional Irrigators Group Canegrowers	ACIL has considered this issue as part of their estimation of energy costs. It is discussed in chapter 3 of ACIL's final report. The QCA has no role in regulating the conduct of generators in the National Electricity Market. The Australian Energy Market Commission (AEMC) has investigated reports of generator re-bidding, and has made changes to the National Electricity Rules in response. Further information can be found at the AEMC website.[86] The QPC is also considering this issue as part of its inquiry into electricity pricing and will make recommendations to the Queensland Government. Further information can be found on the QPC's website.[87]
There needs to be further investigation into alternative tariffs for irrigated agriculture, including controlled supply options.	Canegrowers Isis	The QCA has no role in setting network tariffs or determining customer eligibility for specific network tariffs. Network tariffs, and their eligibility requirements, are established by the distributors and approved by the AER.
Costs for the solar bonus scheme should not be borne by irrigators as they do not have the ability to participate.	Canegrowers Isis	The QCA has no role in determining the funding arrangements for the solar bonus scheme. This is a matter for the Queensland Government and distribution businesses. The allocation of solar bonus scheme costs across tariff classes is determined by distributors and approved by the AER.
The costs of the solar bonus scheme should be paid per connection or from general revenue to prevent large industrial users and irrigators paying a disproportionate amount of its cost.	Canegrowers Isis	The QCA has no role in determining the funding arrangements for the solar bonus scheme. This is a matter for the Queensland Government and distribution businesses.
The QCA should write to the Minister for Energy and Water Supply to request changes to the definition of the UTP.	Cotton Australia	The Queensland Government is responsible for determining the definition of, and the level of subsidy provided by, the UTP. The QPC is conducting an inquiry into electricity pricing and will make recommendations to the Queensland Government on a range of issues including the UTP. Further information can be found on the QPC's website.[88]
The QCA should inform the Queensland Government that it must take into consideration the affordability of electricity.	FNQEUN	The QCA must set notified prices in accordance with the requirements of the Electricity Act and the Minister's delegation. Chapter 2 outlines legal requirements for the QCA when determining notified prices under the Electricity Act. The Government has considered affordability issues through implementing and maintaining the UTP, which subsidises electricity prices for regional customers. The notified prices set by the QCA are consistent with the UTP.

[86] http://www.aemc.gov.au/.
[87] http://www.qpc.qld.gov.au/.
[88] http://www.qpc.qld.gov.au/.

		The QPC is the appropriate body to recommend changes to the pricing framework. The QPC is conducting an inquiry into electricity pricing and will make recommendations to the Queensland Government on a range of electricity issues, including the framework under which notified prices are determined. Further information can be found on the QPC's website.[89]
The requirement for controlled load appliances to be hard-wired to electrical systems should be removed to encourage greater take up of controlled load tariffs.	Master Electricians Australia	The terms and conditions of the controlled load retail tariffs reflect the terms and conditions of the underlying network tariffs. Network tariffs, and their eligibility requirements, are established by distributors and approved by the AER.
A tariff structure should be introduced to reward users of battery banks for solar PV. This tariff structure could be similar to a maximum demand tariff.	Master Electricians Australia	The QCA has no role in determining the availability, or structure, of demand tariffs. The availability and structure of network tariffs are determined by the distributors and approved by the AER. We note that the QPC is examining issues around solar PV and battery storage in its inquiries into electricity pricing and solar feed-in pricing and will make recommendations to the Queensland Government. Further information can be found on the QPC's website.[90]
Any increase in electricity prices will affect the viability of businesses in regional Queensland.	Multiple submissions	The QCA must set notified prices in accordance with the requirements of the Electricity Act and the Minister's delegation. Chapter 2 outlines legal requirements for the QCA when determining notified prices under the Electricity Act. The Government has considered affordability issues through implementing and maintaining the UTP, which subsidises electricity prices for regional customers. The notified prices set by the QCA are consistent with the UTP.
The QCA should show the impacts on bills for a range of customer consumption levels and for different regional centres.	QCOSS Townsville Water and Waste	The QCA has included bill impacts for customers who use more (75th percentile) than the typical (median) customer, as well as customers who use less (25th percentile). See Appendix H for more information.
The QCA should include metering costs in bill impacts and fact sheets.	QCOSS	The QCA provides information to show the impact on customer bills of the QCA's determination on notified prices. As metering charges do not form part of our determination on notified prices (see Chapter 2), and are not determined by the QCA, we do not consider it appropriate to include them in our customer impact analysis.

[89] http://www.qpc.qld.gov.au/.
[90] http://www.qpc.qld.gov.au/.

APPENDIX D: NETWORK TARIFF STRUCTURES

This appendix provides further information on decisions made in Chapter 3. This appendix compares Energex and Ergon Distribution network tariff structures and outlines how tariffs are adjusted to make them consistent with the UTP.

Comparison of Energex and Ergon Energy's tariff structures

Table 24 Comparison of Energex and Ergon Distribution residential and small business customer time-of-use and demand tariffs

Distributor		*Peak*	*Shoulder*	*Off-peak*
Residential (time-of-use)				
Energex (retail tariff 12)	Usage	4 pm–8 pm Mon–Fri 1,044 hours per year	7 am–4 pm, 8 pm–10 pm Mon–Fri 7 am–10 pm weekends 4,431 hours per year	10 pm–7 am every day 3,285 hours per year
Ergon Distribution (retail tariff 12A)	Usage	3 pm–9:30 pm any day of the week, summer[a] only 585 hours per year		All other times 8,175 hours per year
Residential (time-of-use and demand)				
Energex (to be introduced on 1 July 2016)	Usage	Flat usage charge		
	Demand	4 pm–8 pm weekdays 1,044 hours per year		
Ergon Distribution (retail tariff 14)	Usage	Flat usage charge		
	Demand	3 pm–9:30 pm any day of the week, summer[a] months only 585 hours per year		3 pm–9:30 pm any day of the week, non-summer[a] months 1755 hours per year
Small business (time-of-use)				
Energex (retail tariff 22)	Usage	7 am–9 pm, week days 3,654 hours per year		All other times 5,106 hours per year
Ergon Distribution (retail tariff 22A)	Usage	10 am–8 pm on summer[a] week days 540 hours per year		All other times 8,120 hours per year
Small business (time-of-use demand)				
Energex	No network tariff.			
Ergon Distribution (retail tariff 24)	Usage	Flat usage charge		
	Demand	10 am–8 pm on summer[a] weekdays 540 hours per year		10 am–8 pm weekdays in non-summer[a] months 1620 hours per year

a *Summer months are December, January and February.*

Table 25 Comparison of Energex and Ergon Distribution non time-of-use tariffs

Type	*Distributor*	*Fixed*	*Usage*		
Residential (tariff 11)	Energex	c/day	Flat rate c/kWh		
	Ergon Distribution	c/day	c/kWh 1st 1,000 kWh/year	c/kWh next 5,000 kWh/year	c/kWh >6,000 kWh/year
Small business (tariff 20)	Energex	c/day	Flat rate c/kWh		
	Ergon Distribution	c/day	c/kWh 1st 1,000 kWh/year	c/kWh next 19,000 kWh/year	c/kWh >20,000 kWh/year
Small business demand (tariff 41)	Energex	c/day	Flat rate c/kWh	$/kVA/month	
	Ergon Distribution	No network tariff			
Night controlled load (tariff 31)	Energex	n/a	Flat rate c/kWh		
	Ergon Distribution	c/day	Flat rate c/kWh		
Controlled load (tariff 33)	Energex	n/a	Flat rate c/kWh		
	Ergon Distribution	c/day	Flat rate c/kWh		
Unmetered (tariff 91)	Energex	n/a	Flat rate c/kWh		
	Ergon Distribution	c/day	Flat rate c/kWh		

Note: In the Interim Consultation Paper we advised that Ergon Distribution intended to introduce a new controlled load tariff on 1 July 2016. Ergon Distribution has now advised that this tariff will not be introduced in 2016–17.

Ergon Energy tariff structure options

This section outlines the methodology we used in section 3.2.3 to adjust Ergon Distribution network charges to reflect Energex price levels. Our approach to this task is generally consistent with that taken in the 2015–16 determination. The only difference in our approach from 2015–16 is that, due to changes in data availability and reliability, tariffs 11 and 20 have been used as the reference point for Energex price levels.

Establishing network prices

To calculate network prices that reflect Ergon Distribution tariff structures and Energex price levels, we use information on network charges provided by the distributors and customer usage data provided by Ergon Retail. Using this data, we then lower charges under the Ergon Distribution network tariff[91] to a level where the average customer pays the same as they would under the equivalent Energex network tariff.

This calculated network tariff is then used as the basis of a retail tariff.

Seasonal time-of-use tariffs

Ergon Distribution has seasonal time-of-use network tariffs for residential and small business customers. These form the basis of retail tariffs 12A (residential) and 22A (small business). To create retail tariffs that reflect Ergon Distribution network tariff structures, while broadly reflecting Energex price levels, the QCA

[91] The applicable network tariff for Ergon Distribution's east zone, transmission region one.

adjusted all charges under the Ergon Distribution network tariff so that the total network cost for the average customer was the same as the equivalent Energex flat-rate network tariff.

The results are shown in tables 26 and 27.

Table 26 Network prices for tariff 12A

	Fixed c/day	*Peak/flat c/kWh*	*Off-peak c/kWh*
Energex 8400	50.200	11.624	n/a
Ergon Distribution ERTOUT1	156.000	38.375	7.558
QCA adjusted Ergon Distribution ERTOUT1	61.375	38.375	7.558

Note: Based on data provided by Ergon Distribution, an annual usage of 5,093 kWh was used, with 10.6% peak usage and 89.4% off-peak.

Table 27 Network prices for tariff 22A

	Fixed c/day	*Peak/flat c/kWh*	*Off-peak c/kWh*
Energex 8500	72.000	12.486	n/a
Ergon Distribution EBTOUT1	156.000	35.161	11.815
QCA adjusted Ergon Distribution EBTOUT1	72.000	30.462	10.236

Note: Based on data provided by Ergon Distribution, an annual usage of 13,302 kWh was used, with 11.1% peak usage and 88.9% off-peak.

Time-of-use demand tariffs

Ergon Distribution has seasonal time of use and demand tariffs for residential and small business customers. These form the basis of retail tariffs 14 (residential) and 24 (small business). To calculate network prices for these retail tariffs, we uniformly reduced all charges in the Ergon Distribution network tariff to equalise the average customer's network bill with the bill they would face on the equivalent Energex flat-rate network tariff. While Ergon Distribution considered that this option did not provide a sufficient differential between peak and off-peak demand charges for tariff 14, we considered that this approach preserves the relativities within the tariff structure and we do not consider that the differential between peak and off-peak demand charges needs to be adjusted under this option.

The resulting network prices are shown in tables 28 and 29.

Table 28 Network prices for tariff 14

	Fixed c/day	*Usage c/kWh*	*Peak demand $/kW/mth*	*Off-peak demand $/kW/mth*
Energex 8400	50.200	11.624	n/a	n/a
Ergon Distribution ERTOUDCT1	31.000	4.660	72.782	13.261
QCA adjusted Ergon Distribution ERTOUDCT1	22.525	3.386	52.885	9.636

Note: Based on data provided by Ergon Distribution, a peak demand of 1.38 kW per month, an off-peak demand of 3.48 kW per month, and a usage level of 5,093 kWh per annum were used.

Table 29 Network prices for tariff 24

	Fixed c/day	*Usage c/kWh*	*Peak demand $/kW/mth*	*Off-peak demand $/kW/mth*
Energex 8500	72.000	12.486	n/a	n/a
Ergon Distribution EBTOUDCT1	31.000	5.460	90.448	14.862
QCA adjusted Ergon Distribution EBTOUDCT1	24.540	4.322	71.601	11.765

Note: Based on data provided by Ergon Distribution, a peak demand of 2.9 kW per month, an off-peak demand of 6.02 kW per month, and a usage level of 13,302 kWh per annum were used.

Non time-of-use tariffs

As discussed in Chapter 3, the QCA examined the impact of using Ergon Distribution's inclining block tariff (IBT) structure as the basis for flat-rate retail tariffs 11 and 20. For the purposes of this assessment, we calculated network prices by uniformly reducing all charges in the Ergon Distribution network tariff to equalise the total network revenue recovered by Ergon Distribution under an inclining block tariff with the network revenue it would have otherwise recovered under a flat rate tariff.

The resulting network prices and charts demonstrating the impact on consumers are shown below.

Table 30 Network prices for tariff 11

	Fixed c/day	*Flat/first block[a] c/kWh*	*Second block[b] c/kWh*	*Third block[c] c/kWh*
Energex 8400	50.200	11.624	n/a	n/a
Ergon Distribution ERIBT1	156.000	4.768	11.146	14.904
QCA adjusted Ergon Distribution ERIBT1	107.814	3.295	7.703	10.300

a. All usage under Energex network tariff, usage of less than 2.74 kWh per day under Ergon Distribution network tariff

b. Usage greater than 2.74 kWh per day and less than 16.43 kWh per day (Ergon Distribution network tariff only)

c. All usage above 16.43 kWh per day (Ergon Distribution network tariff only)

Figure 17 Impact on tariff 11 customers adopting Ergon Distribution inclining block tariff structure

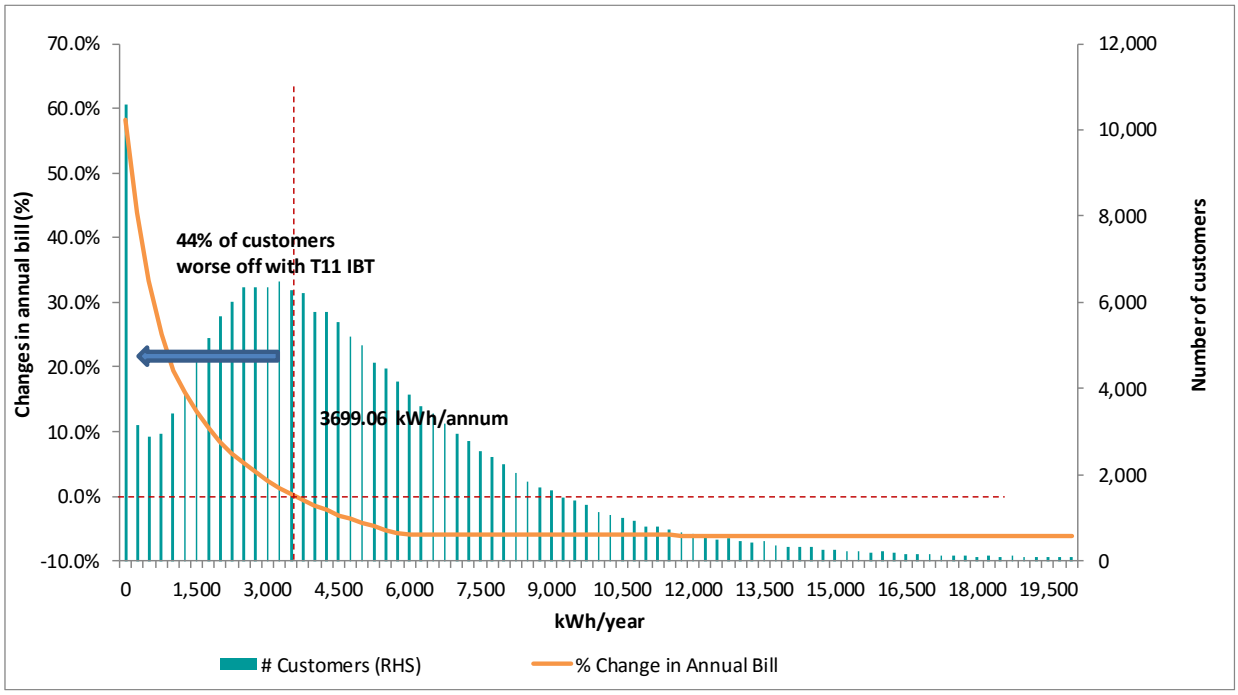


Table 31 Network prices for tariff 20

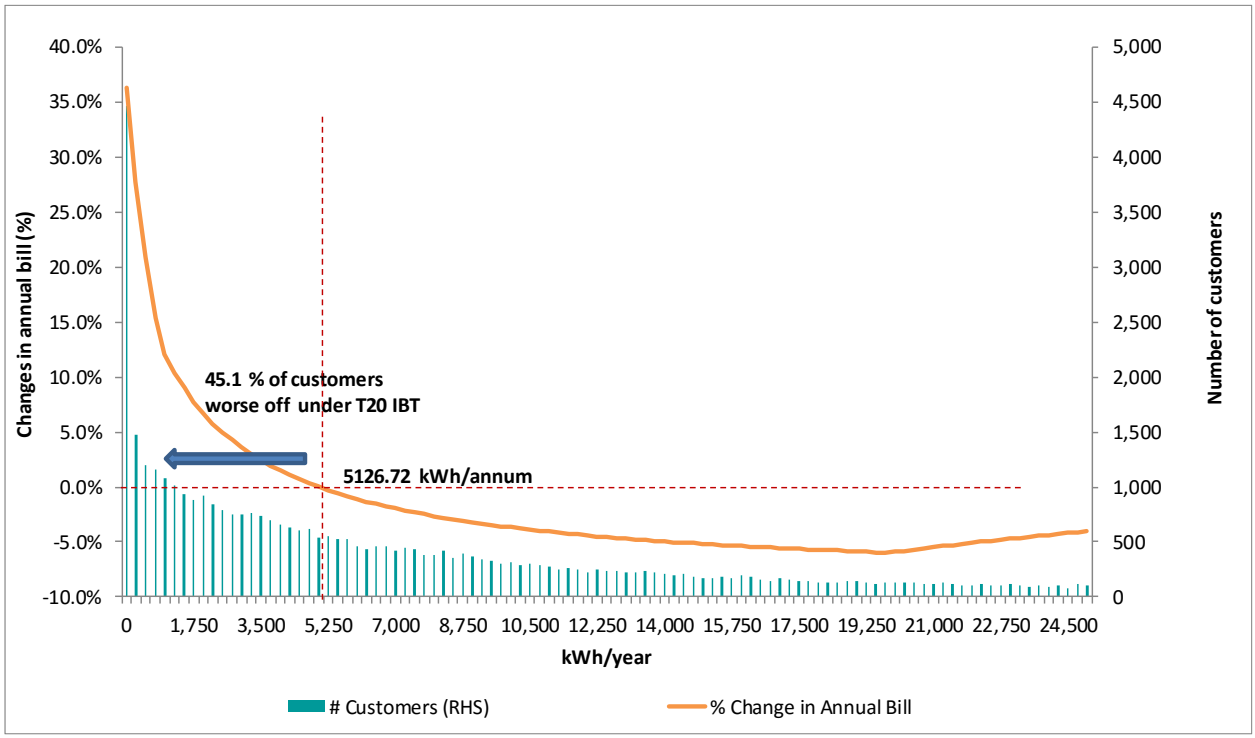
	Fixed c/day	*Flat/first block[a] c/kWh*	*Second block[b] c/kWh*	*Third block[c] c/kWh*
Energex 8500	72.000	12.486	n/a	n/a
Ergon Distribution EBIBT1	156.000	5.180	13.454	17.078
QCA adjusted Ergon Distribution EBIBT1	122.492	4.067	10.564	13.410

***a**. All usage under Energex network tariff, usage of less than 2.74 kWh per day under Ergon Distribution network tariff*

***b**. Usage greater than 2.74 kWh per day and less than 54.76 kWh per day (Ergon Distribution network tariff only)*

***c**. All usage above 54.76 kWh per day (Ergon Distribution network tariff only)*

Figure 18 Impact on tariff 20 customers adopting Ergon Distribution inclining block tariff structure



APPENDIX E: TRANSITIONAL AND OBSOLETE TARIFFS—CUSTOMER IMPACTS

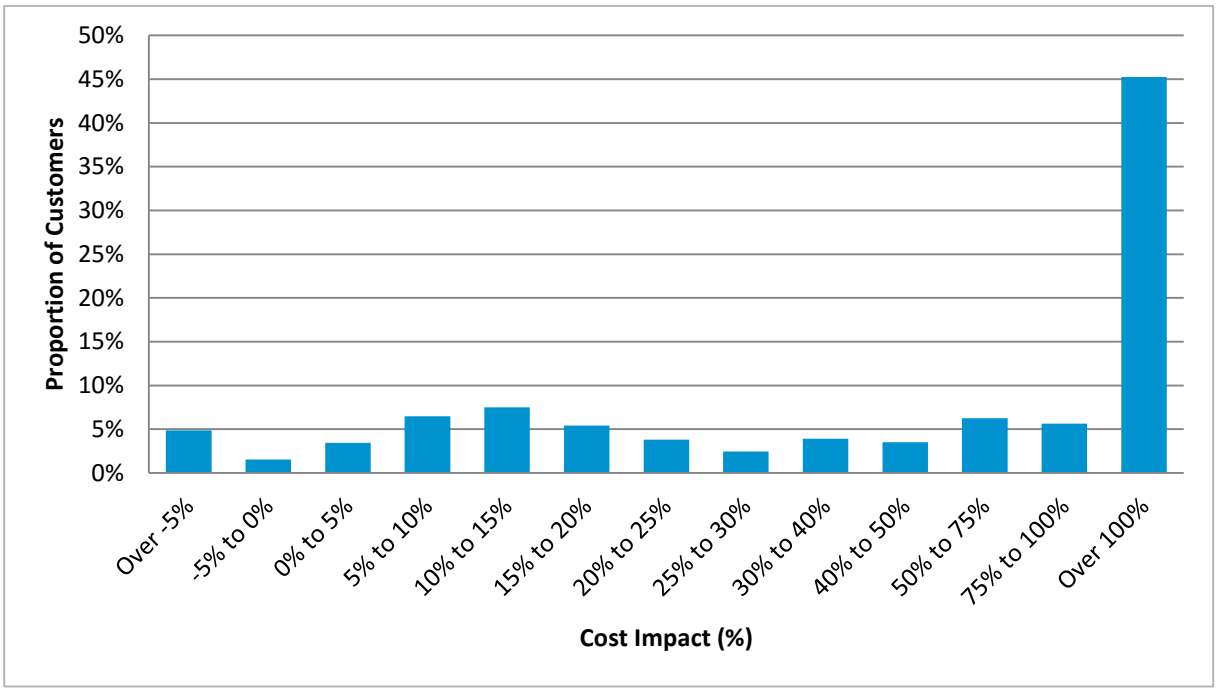
In Chapter 7 we discuss our decision on arrangements for customers on transitional and obsolete retail tariffs. This appendix contains the analysis of bill impacts for customers moving from their transitional or obsolete 2015–16 tariff to an alternative 2015–16 standard business tariff.

The customer impacts are calculated on an individual tariff basis. As some customers are supplied under multiple tariffs, the overall impact to an individual customer may be a combination of the impacts shown below.

Tariff 21

Tariffs 21 is a declining block tariff that aligns with tariff 20 for small business customers. Figure 19 below shows the distribution of potential impacts for existing customers moving to this standard business tariff.

Figure 19 Change in electricity bills for small business customers on tariff 21 moving to tariff 20

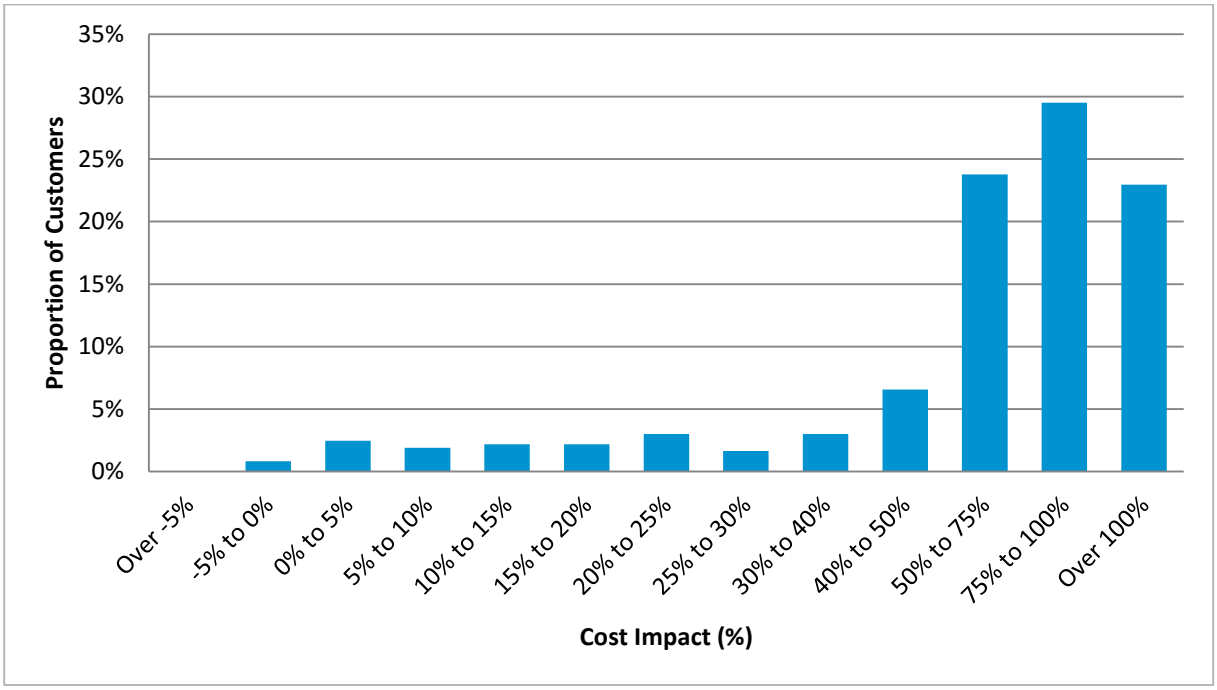


Source: Ergon Retail

Tariff 22

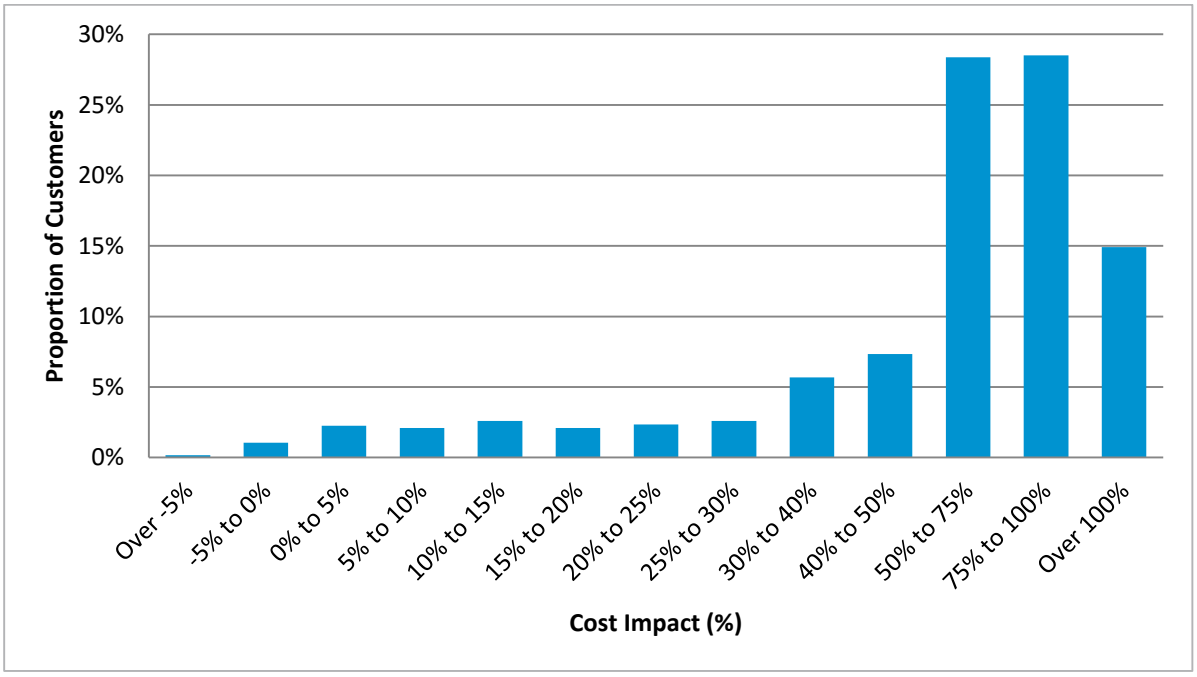
Tariff 22 is a time-of-use small business tariff which is based on an Energex tariff structure. This tariff is being phased out and will be replaced by tariff 22A, which is based on the equivalent Ergon Distribution seasonal time-of-use small business tariff structure. Depending on how they consume electricity customers may also opt to move to tariff 20, a flat rate tariff. Figures 20 and 21 below show the distribution of potential impacts for existing customers moving to tariff 20 or 22A.

Figure 20 Change in electricity bills for small business customers on tariff 22 moving to tariff 20



Source: Ergon Retail

Figure 21 Change in electricity bills for small business customers on tariff 22 moving to tariff 22A

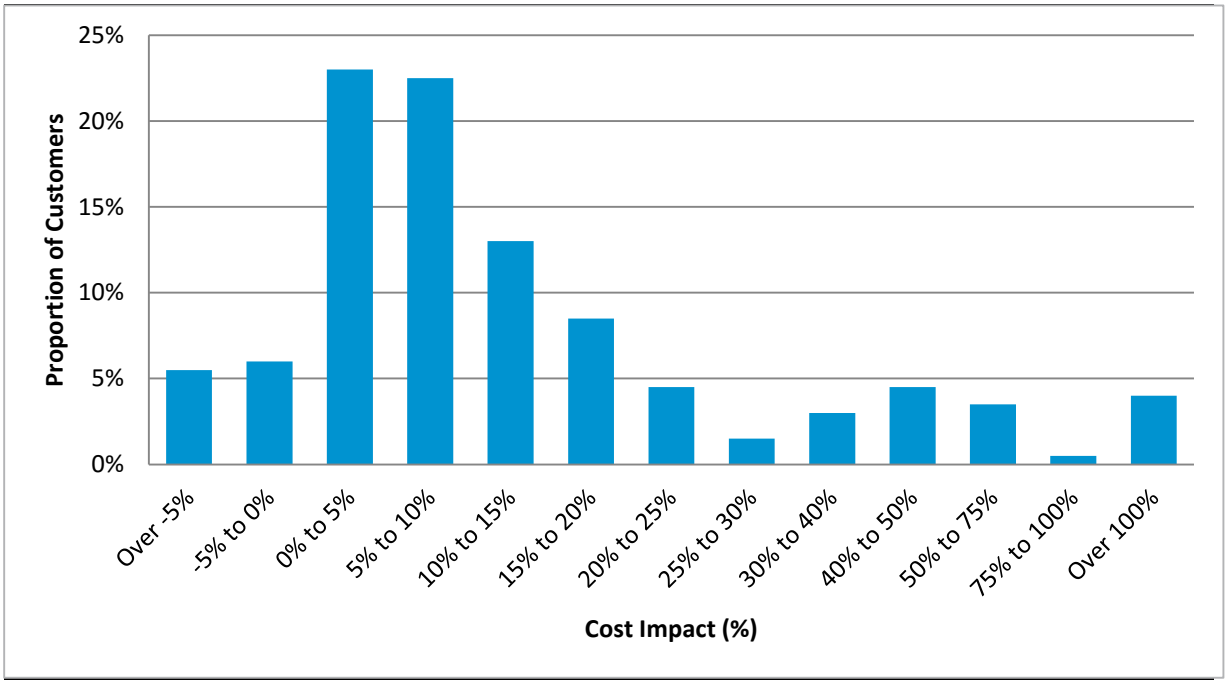


Source: Ergon Retail

Tariff 37

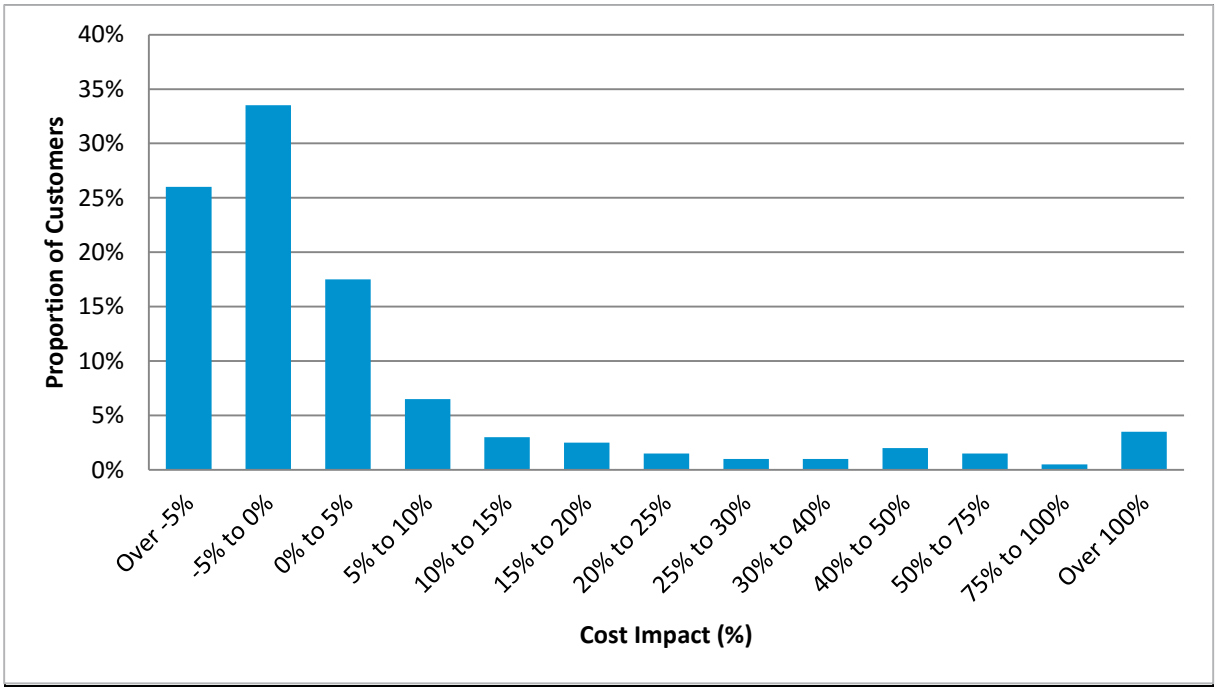
Tariff 37 is a business time-of-use tariff that aligns with tariff 20 or 22A for small business customers and one of tariffs 44 to 48 for large business customers. Figures 22–24 below show the distribution of potential impacts for existing customers moving to these standard business tariffs.

Figure 22 Change in electricity bills for small business customers on tariff 37 moving to tariff 20



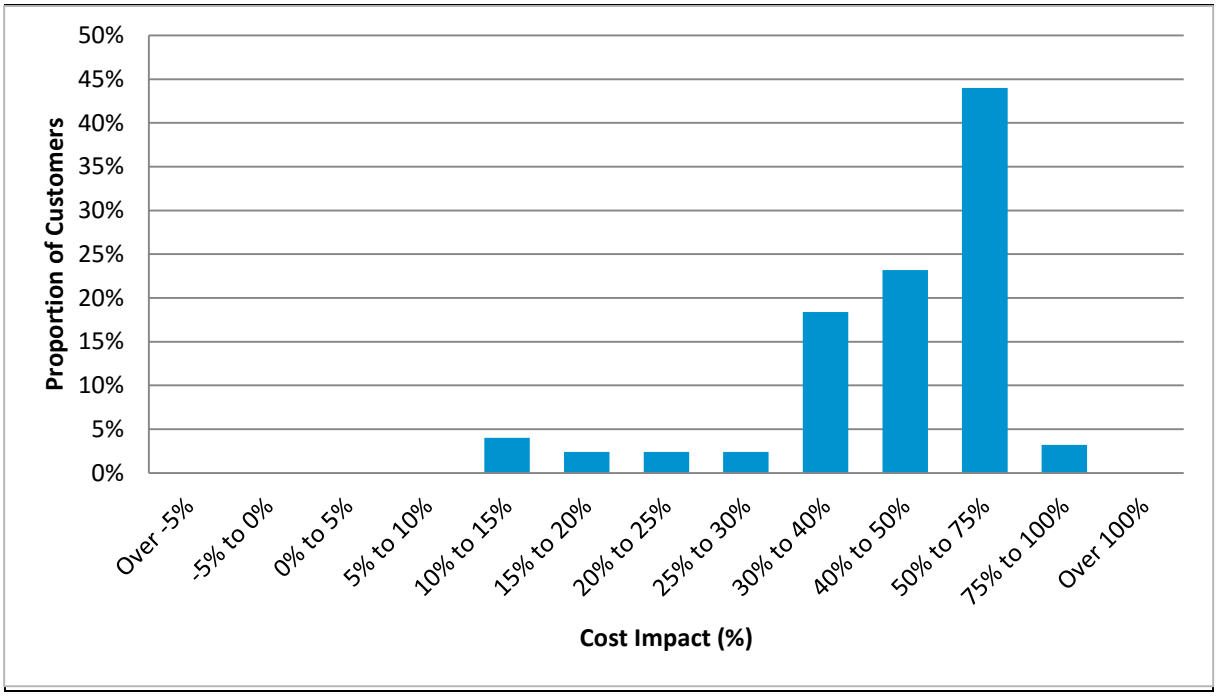
Source: Ergon Retail

Figure 23 Change in electricity bills for small business customers on tariff 37 moving to tariff 22A



Source: Ergon Retail

Figure 24 Change in electricity bills for large business customers on tariff 37 moving to one of tariffs 44 to 48



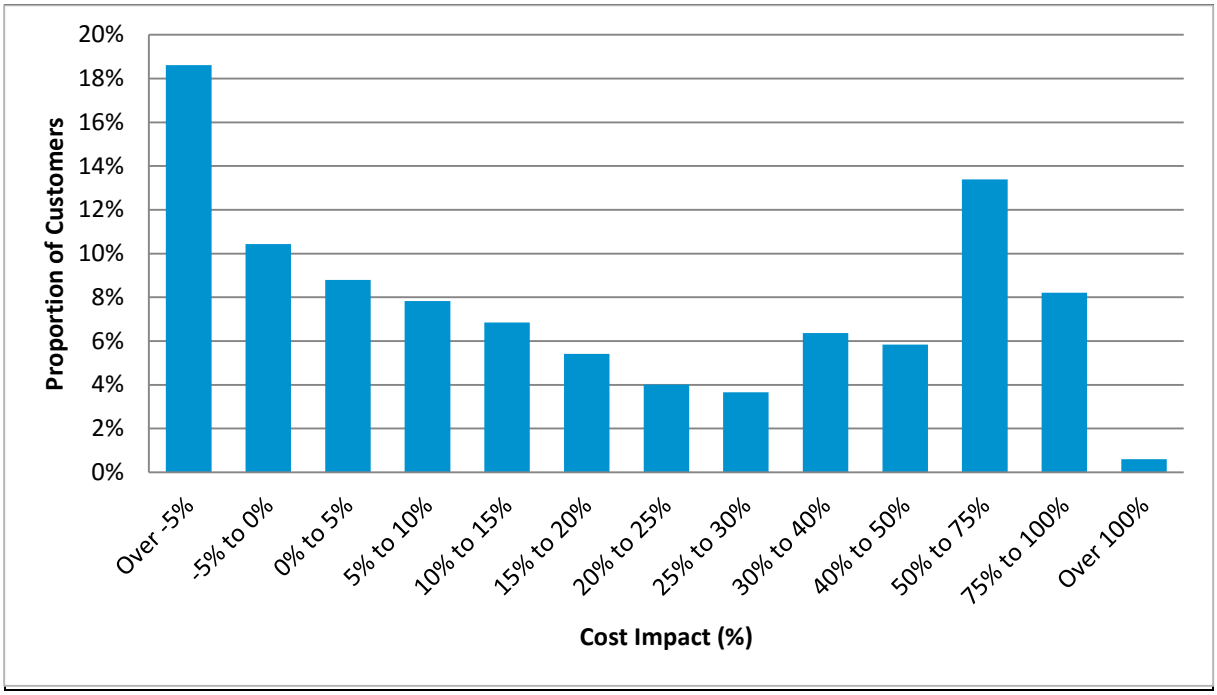
Note: For this analysis Ergon Retail has applied a derived demand profile for customers where demand data is unavailable. Therefore individual cost impacts may be over- or under-stated for individual customers depending on their unique demand profile.

Source: Ergon Retail

Tariffs 62 and 65

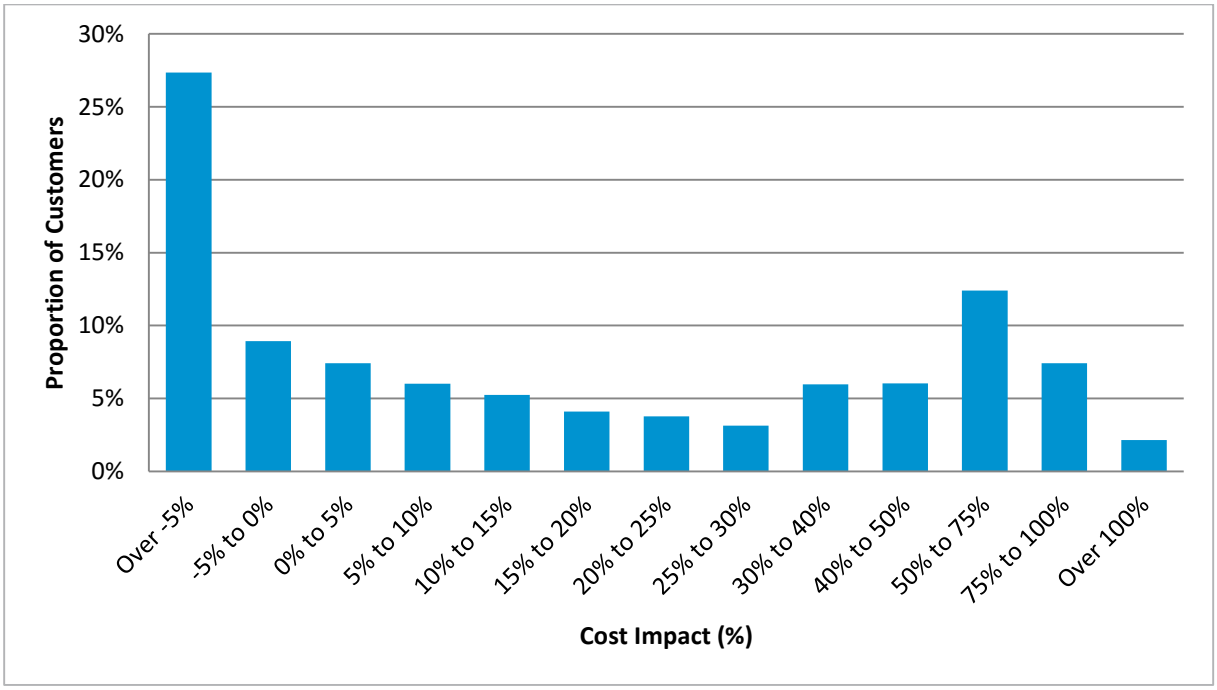
Tariffs 62 and 65 are time-of-use tariffs for farming and irrigation customers. These tariffs align with tariff 20 or 22A for small business customers and tariffs 44 and 45 for large business customers. Figures 25–30 below show the distribution of potential impacts for existing customers moving to these standard business tariffs.

Figure 25 Change in electricity bills for small business customers on tariff 62 moving to tariff 20



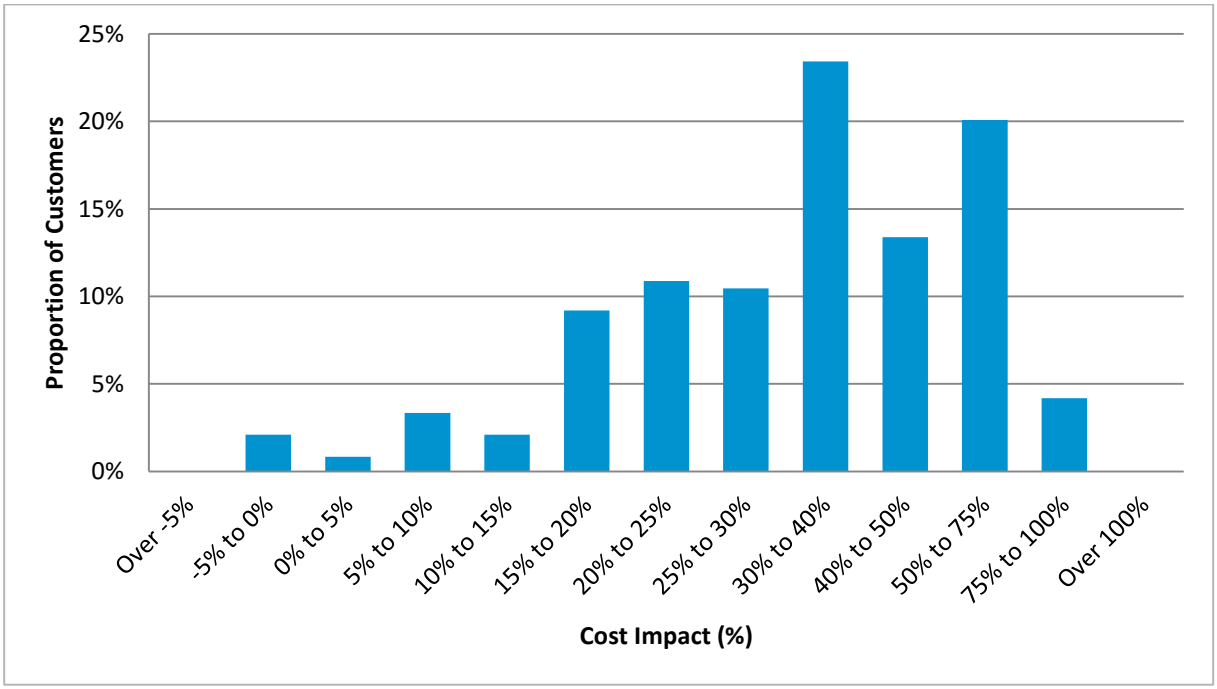
Source: Ergon Retail

Figure 26 Change in electricity bills for small business customers on tariff 62 moving to tariff 22A



Source: Ergon Retail

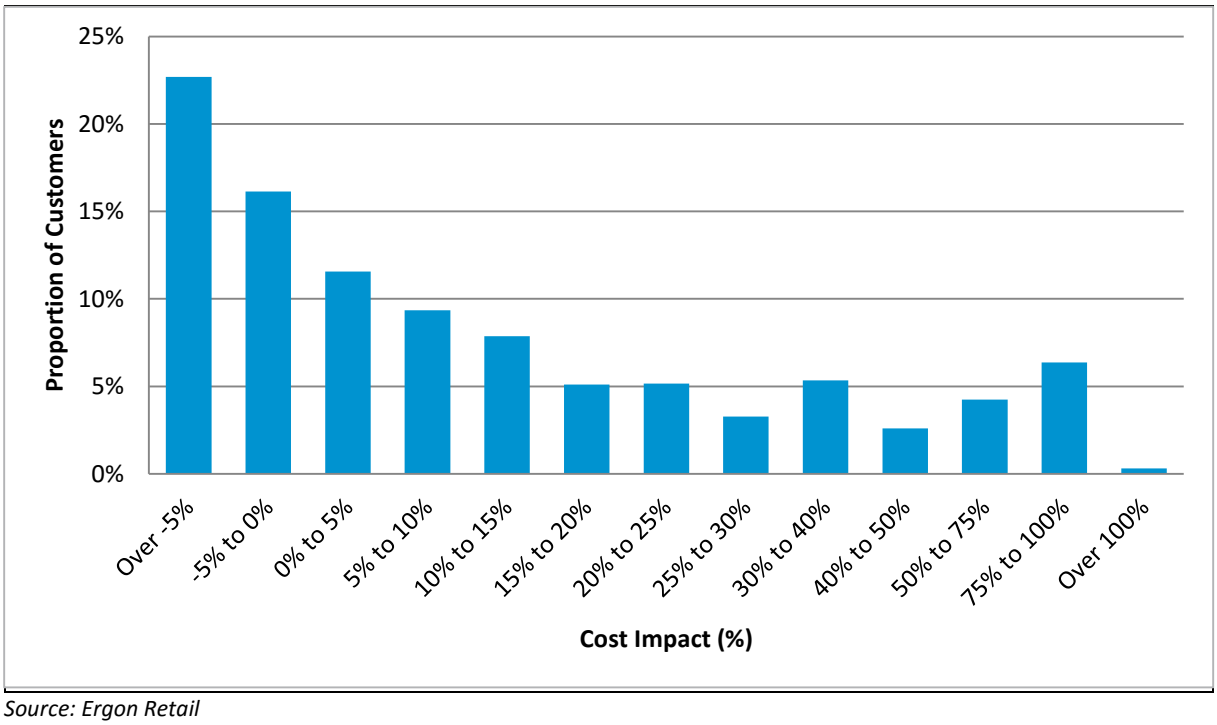
Figure 27 Change in electricity bills for large business customers on tariff 62 moving to tariff 44 or 45



Note: For this analysis Ergon Retail has applied a derived demand profile for customers where demand data is unavailable. Therefore, individual cost impacts may be over- or under-stated for individual customers depending on their unique demand profile.

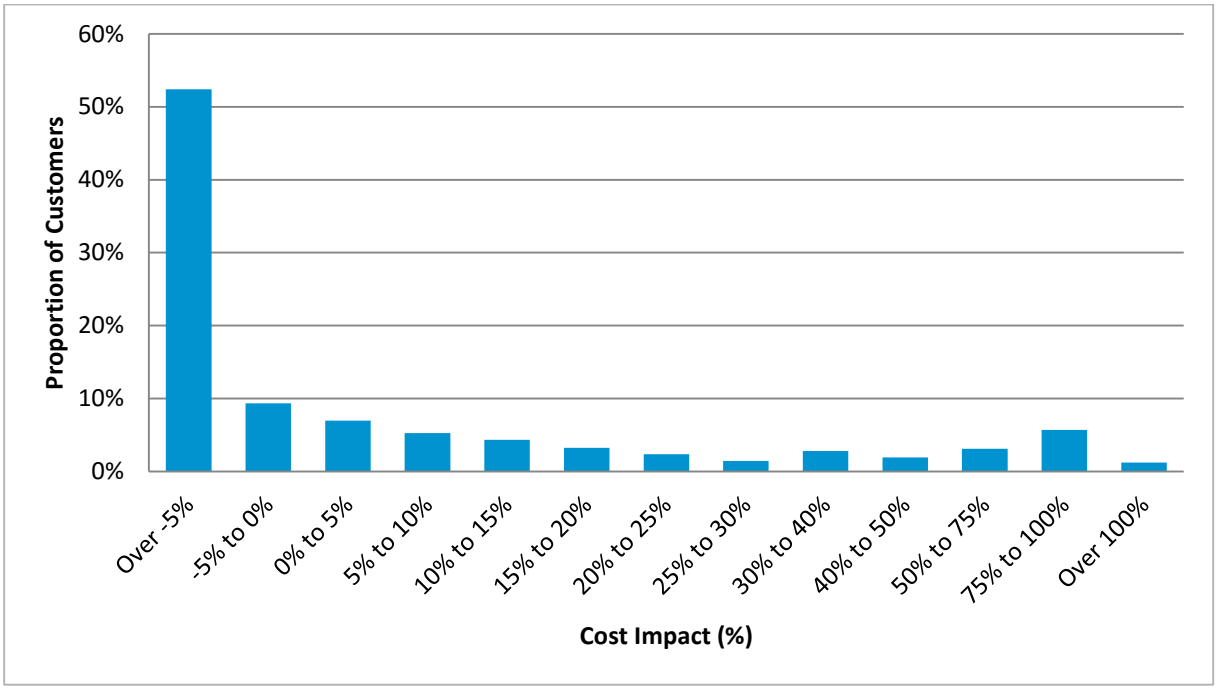
Source: Ergon Retail

Figure 28 Change in electricity bills for small business customers on tariff 65 moving to tariff 20



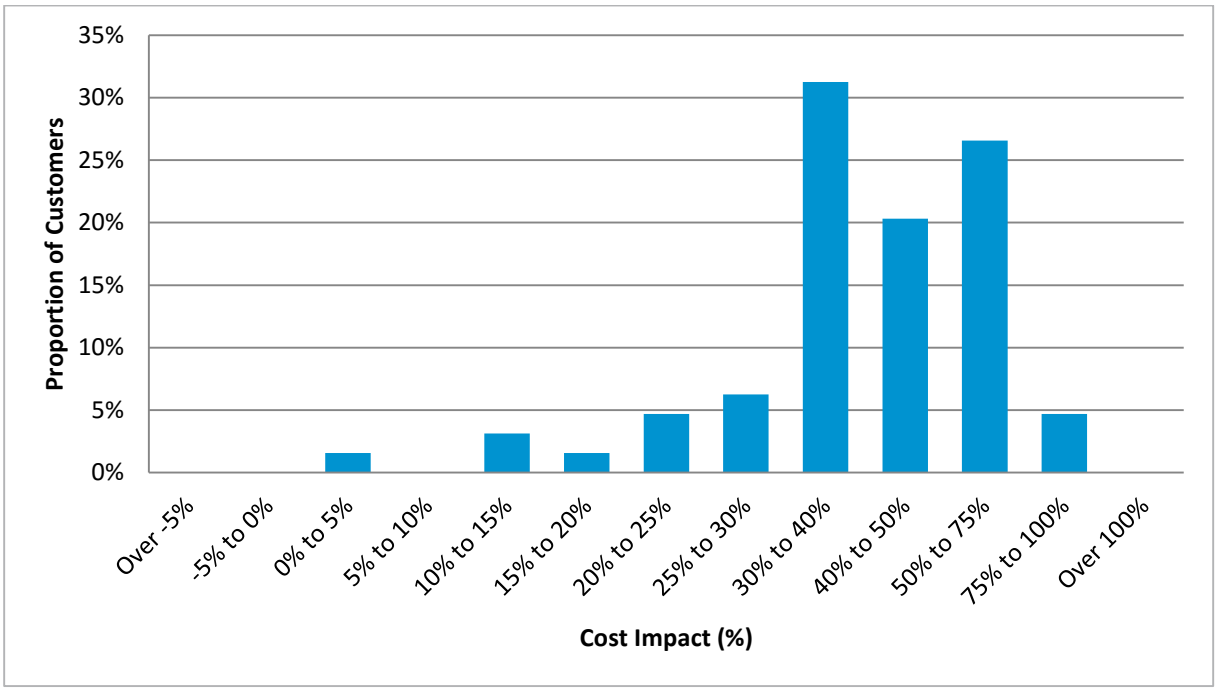
Source: Ergon Retail

Figure 29 Change in electricity bills for small business customers on tariff 65 moving to tariff 22A



Source: Ergon Retail

Figure 30 Change in electricity bills for large business customers on tariff 65 moving to tariff 44 or 45



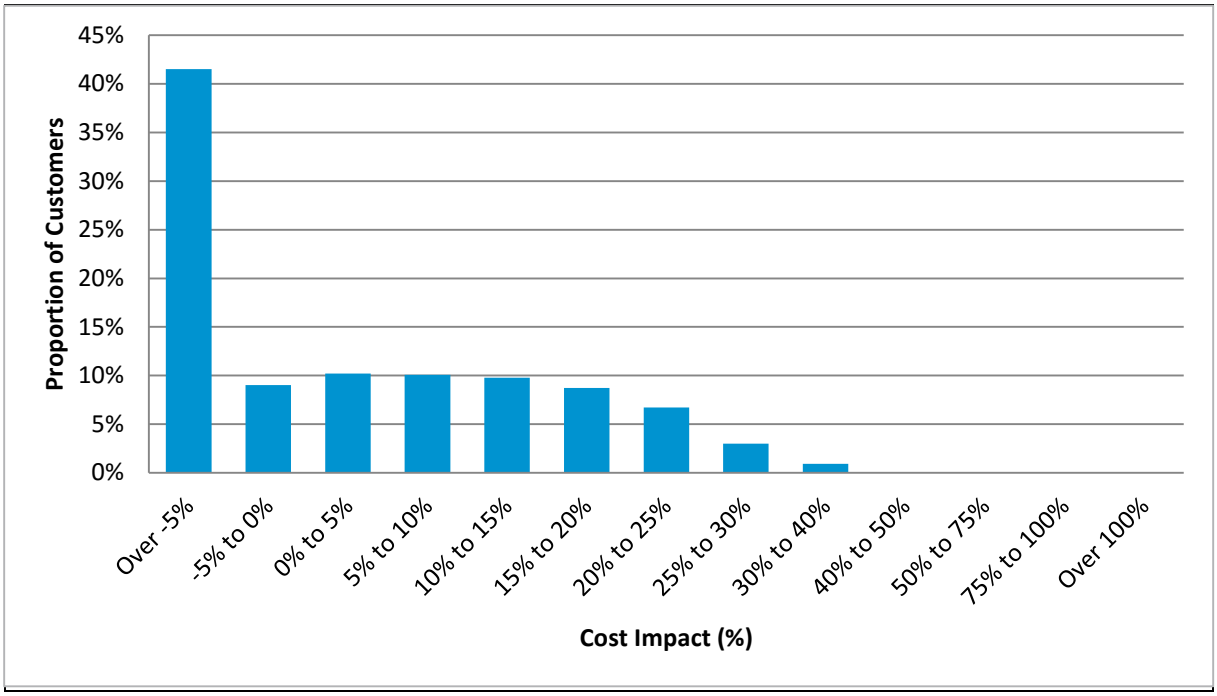
Note: For this analysis Ergon Retail has applied a derived demand profile for customers where demand data is unavailable. Therefore, individual cost impacts may be over- or under-stated for individual customers depending on their unique demand profile.

Source: Ergon Retail

Tariff 66

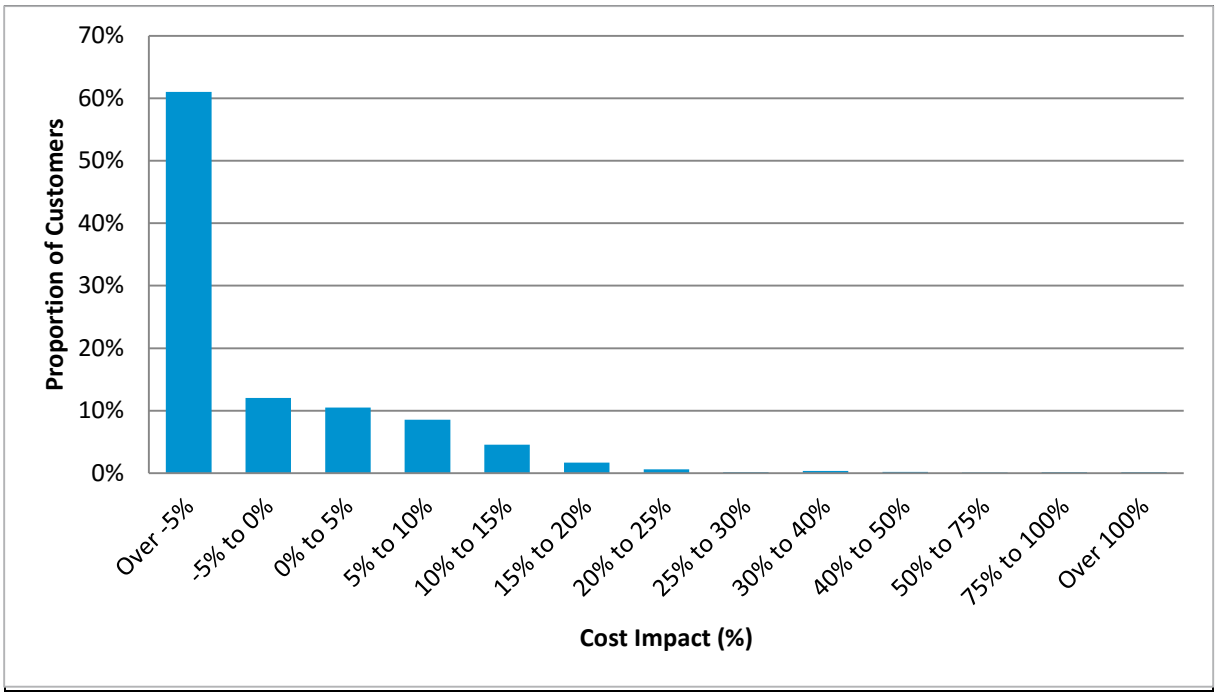
Tariff 66 is a flat-rate tariff for irrigation customers. This tariff aligns with tariff 20 or 22A for small business customers and tariffs 44 and 45 for large business customers. Figures 31–33 below show the distribution of potential impacts for existing customers moving to these standard business tariffs.

Figure 31 Change in electricity bills for small business customers on tariff 66 moving to tariff 20



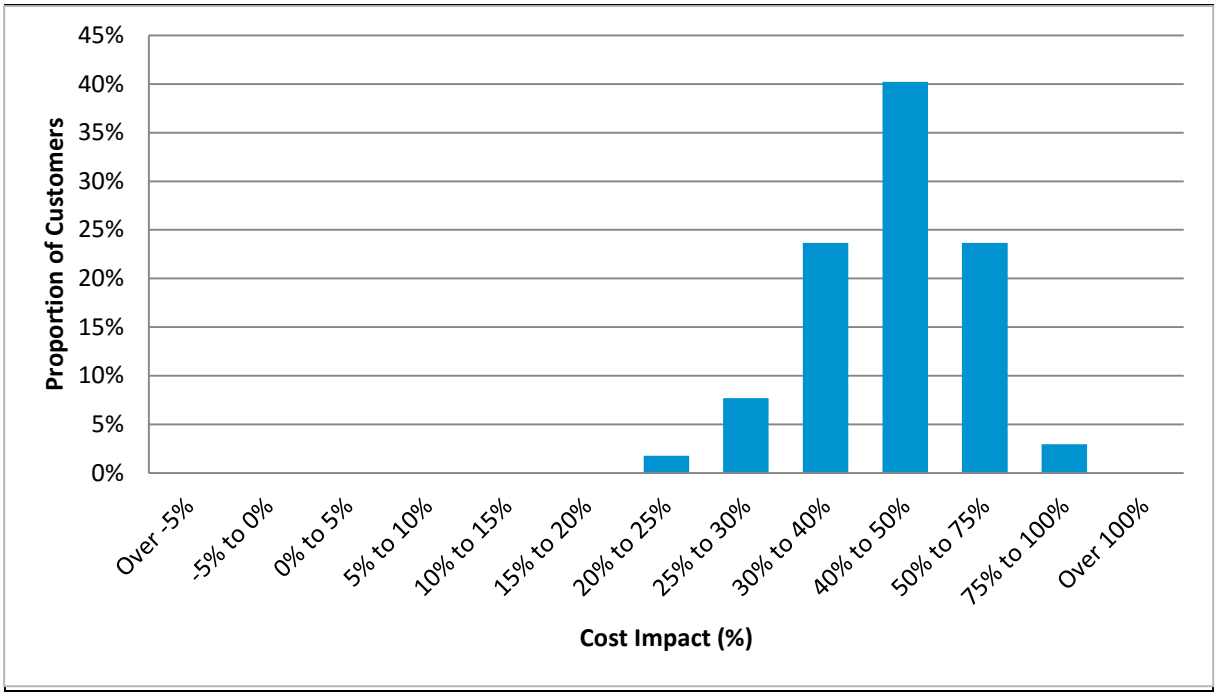
Source: Ergon Retail

Figure 32 Change in electricity bills for small business customers on tariff 66 moving to tariff 22A



Source: Ergon Retail

Figure 33 Change in electricity bills for large business customers on tariff 66 moving to tariff 44 or tariff 45



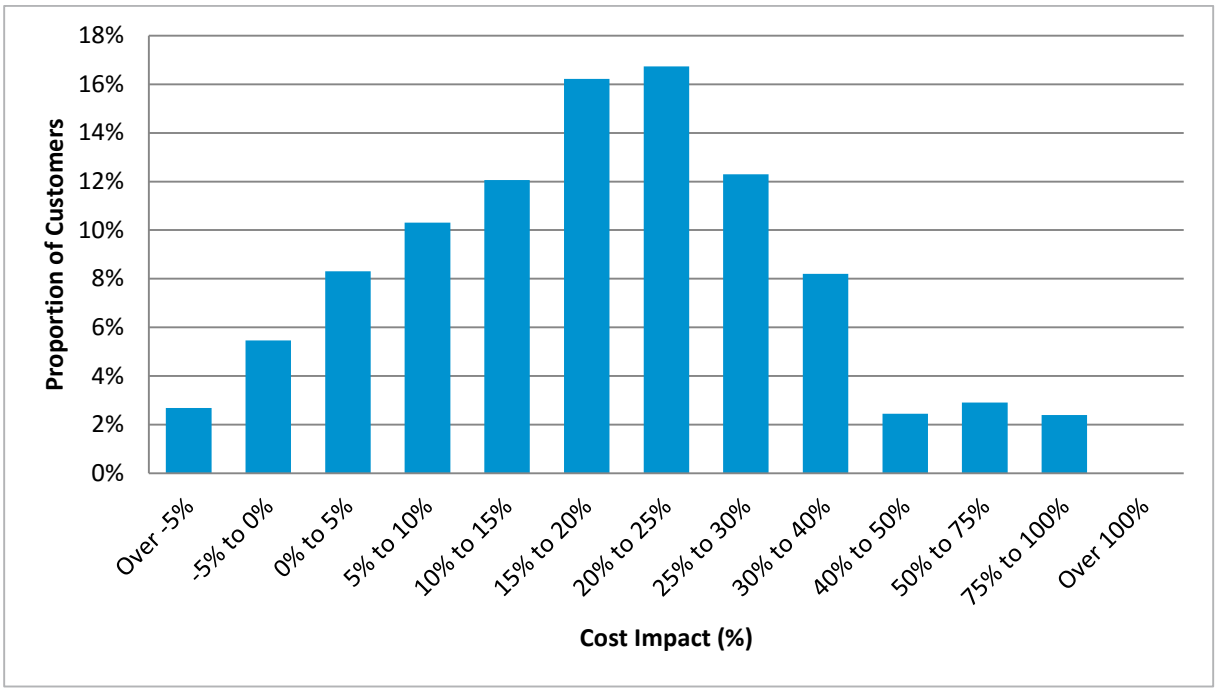
Note: For this analysis Ergon Retail has applied a derived demand profile for customers where demand data is unavailable. Therefore, individual cost impacts may be over- or under-stated for individual customers depending on their unique demand profile

Source: Ergon Retail

Large business customer tariffs

Transitional large tariffs 20 (large) and 22 (small and large) align with tariffs 44 to 48, which are based on Ergon Energy network tariffs and charges. Figures 34 and 35 show the likely impacts for large business customers moving from these transitional tariffs to the most appropriate of the standard large business customer tariffs.

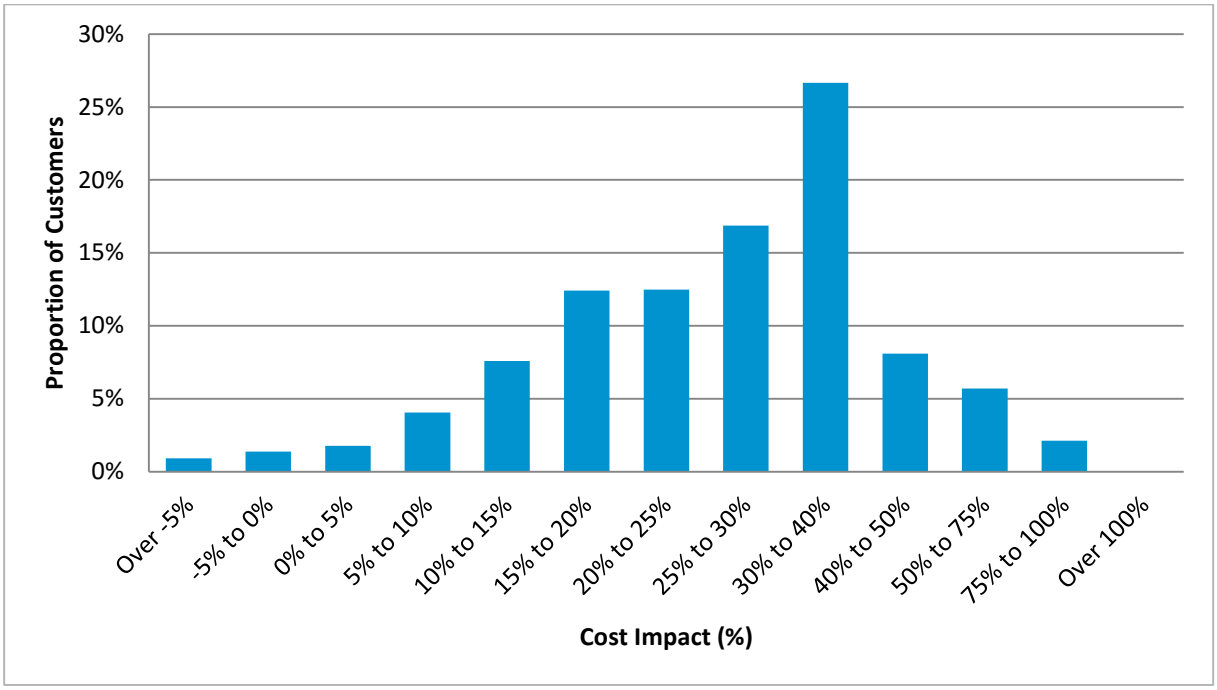
Figure 34 Change in electricity bills for business customers on tariff 20 (large) moving to one of tariffs 44 to 48



Note: For this analysis Ergon Retail has applied a derived demand profile for customers where demand data is unavailable. Therefore, individual cost impacts may be over- or under-stated for individual customers depending on their unique demand profile.

Source: Ergon Retail

Figure 35 Change in electricity bills for business customers on tariff 22 (small and large) moving to one of tariffs 44 to 48



Note: For this analysis Ergon Retail has applied a derived demand profile for customers where demand data is unavailable. Therefore, individual cost impacts may be over- or under-stated for individual customers depending on their unique demand profile.

Source: Ergon Retail

APPENDIX F: BUILD-UP OF PRICES

Table 32 Regulated retail tariffs and prices for residential customers (GST exclusive)

Tariff	*Tariff component*	*Fixed[a] (c/day)*	*Peak usage (c/kWh)*	*Off-peak/flat usage (c/kWh)*	*Peak demand ($/kW/month)*	*Off-peak/flat demand ($/kW/month)*
Tariff 11 (flat rate)	Network	50.200		11.624		
	Energy			9.445		
	Fixed Retail	35.107				
	Variable Retail			2.376		
	Standing offer adjustment	4.265		1.172		
	SRES cost pass-through			-0.0077		
	Total	**89.572**		**24.610**		
Tariff 12A (time-of-use)	Network	61.375	38.375	7.558		
	Energy		9.445	9.445		
	Fixed Retail	35.107				
	Variable Retail		5.392	1.917		
	Standing offer adjustment	4.824	2.661	0.946		
	SRES cost pass-through		-0.0077	-0.0077		
	Total	**101.306**	**55.865**	**19.859**		
Tariff 14 (time-of-use demand)	Network	22.525		3.386	52.885	9.636
	Energy			9.445		
	Fixed Retail	35.107				
	Variable Retail			1.447	5.963	1.086
	Standing offer adjustment	2.882		0.714	2.942	0.536
	SRES cost pass-through			-0.0077		
	Total	**60.514**		**14.984**	**61.790**	**11.258**

Tariff	*Tariff component*	*Fixed[a] (c/day)*	*Peak usage (c/kWh)*	*Off-peak/flat usage (c/kWh)*	*Peak demand ($/kW/month)*	*Off-peak/flat demand ($/kW/month)*
Tariff 31 (controlled load)	Network			6.421		
	Energy			5.930		
	Fixed Retail					
	Variable Retail			1.393		
	Standing offer adjustment			0.687		
	SRES cost pass-through			-0.0077		
	Total			**14.423**		
Tariff 33 (controlled load)	Network			9.686		
	Energy			7.404		
	Fixed Retail					
	Variable Retail			1.927		
	Standing offer adjustment			0.951		
	SRES cost pass-through			-0.0077		
	Total			**19.960**		

***a**. Charged per metering point.*

Note: totals may not add due to rounding.

Table 33 Regulated retail tariffs and prices for small business and unmetered supply customers, except street lighting customers (GST exclusive)

Tariff	*Tariff component*	*Fixed[a] (c/day)*	*Peak usage (c/kWh)*	*Off-peak/flat usage (c/kWh)*	*Peak demand ($/kW/month)*	*Off-peak/flat demand ($/kW/month)*
Tariff 20 (flat rate)	Network	72.000		12.486		
	Energy			9.445		
	Fixed Retail	49.790				
	Variable Retail			2.807		
	Standing offer adjustment	6.089		1.237		
	SRES cost pass-through			-0.0077		
	Total	**127.879**		**25.968**		
Tariff 22 (time-of-use - obsolete)	Network	72.000	14.395	9.683		
	Energy		9.445	9.445		
	Fixed Retail	49.790				
	Variable Retail		3.052	2.448		
	Standing offer adjustment	6.089	1.345	1.079		
	SRES cost pass-through		-0.0077	-0.0077		
	Total	**127.879**	**28.229**	**22.648**		
Tariff 22A (time-of-use)	Network	72.000	30.462	10.236		
	Energy		9.445	9.445		
	Fixed Retail	49.790				
	Variable Retail		5.108	2.519		
	Standing offer adjustment	6.089	2.251	1.110		
	SRES cost pass-through		-0.0077	-0.0077		
	Total	**127.879**	**47.258**	**23.303**		
Tariff 24 (time-of-use demand)	Network	24.540		4.322	71.601	11.765
	Energy			9.445		
	Fixed Retail	49.790				
	Variable Retail			1.762	9.165	1.506

Tariff	*Tariff component*	*Fixed[a] (c/day)*	*Peak usage (c/kWh)*	*Off-peak/flat usage (c/kWh)*	*Peak demand ($/kW/month)*	*Off-peak/flat demand ($/kW/month)*
	Standing offer adjustment	3.716		0.776	4.038	0.664
	SRES cost pass-through			-0.0077		
	Total	**78.046**		**16.299**	**84.804**	**13.935**
Tariff 41 (low voltage - demand)	Network	532.100		2.056		24.351
	Energy			9.445		
	Fixed Retail	49.790				
	Variable Retail			1.472		3.117
	Standing offer adjustment	29.094		0.649		1.373
	SRES cost pass-through			-0.0077		
	Total	**610.984**		**13.615**		**28.841**
Tariff 91 (unmetered)	Network			10.298		
	Energy			9.445		
	Fixed Retail					
	Variable Retail			2.527		
	Standing offer adjustment			1.114		
	SRES cost pass-through			-0.0077		
	Total			**23.376**		

***a**. Charged per metering point.*

Note: totals may not add due to rounding.

Table 34 Regulated retail tariffs and prices for large business and street lightning customers (GST exclusive)

Tariff	*Tariff component*	*Fixed[a] (c/day)*	*Peak usage (c/kWh)*	*Off-peak/flat usage (c/kWh)*	*Peak demand ($/kW/month)*	*Off-peak/flat demand ($/kW/month)*
Tariff 44 (over 100 MWh small (demand))	Network	4568.700		2.201		35.801
	Energy			8.855		
	Fixed Retail	492.445				
	Variable Retail			0.668		2.164
	Headroom	253.057		0.586		1.898
	SRES cost pass-through			-0.0081		
	Total	**5314.202**		**12.302**		**39.863**
Tariff 45 (over 100 MWh medium (demand))	Network	14751.500		2.283		28.422
	Energy			8.855		
	Fixed Retail	1117.230				
	Variable Retail			0.673		1.718
	Headroom	793.437		0.591		1.507
	SRES cost pass-through			-0.0081		
	Total	**16662.167**		**12.393**		**31.647**
Tariff 46 (over 100 MWh large (demand))	Network	39607.000		2.467		25.257
	Energy			8.855		
	Fixed Retail	2632.909				
	Variable Retail			0.684		1.527
	Headroom	2111.995		0.600		1.339
	SRES cost pass-through			-0.0081		
	Total	**44351.904**		**12.599**		**28.123**
Tariff 47 (high voltage (demand))	Network	37183.400		2.078		23.257
	Energy			8.317		
	Fixed Retail	2372.031				
	Variable Retail			0.628		1.406
	Headroom	1977.772		0.551		1.233

Tariff	*Tariff component*	*Fixed[a] (c/day)*	*Peak usage (c/kWh)*	*Off-peak/flat usage (c/kWh)*	*Peak demand ($/kW/month)*	*Off-peak/flat demand ($/kW/month)*
	SRES cost pass-through			-0.0077		
	Total	**41533.203**		**11.567**		**25.896**
Tariff 48 (over 4 GWh high voltage (demand))	Network	37183.400		2.078		23.257
	Energy			8.317		
	Fixed Retail	2787.627				
	Variable Retail			0.628		1.406
	Headroom	1998.551		0.551		1.233
	SRES cost pass-through			-0.0077		
	Total	**41969.578**		**11.567**		**25.896**
Tariff 50 (over 100 MWh time-of-use and demand)	Network	3822.400	1.779	4.863	54.966	13.257
	Energy		8.855	8.855		
	Fixed Retail	456.956				
	Variable Retail		0.643	0.829	3.322	0.801
	Headroom	213.968	0.564	0.727	2.914	0.703
	SRES cost pass-through		-0.0081	-0.0081		
	Total	**4493.324**	**11.832**	**15.266**	**61.203**	**14.761**
Tariff 71 (street lighting)	Network	0.700		19.445		
	Energy			8.855		
	Fixed Retail					
	Variable Retail			1.711		
	Headroom	0.035		1.501		
	SRES cost pass-through			-0.0081		
	Total	**0.735**		**31.503**		

***a**. Charged per metering point.*

Note: totals may not add due to rounding.

APPENDIX G: GAZETTE NOTICE

Queensland Government Gazette

RETAIL ELECTRICITY PRICES FOR STANDARD CONTRACT CUSTOMERS

Electricity Act 1994

The notified prices are the prices decided under section 90(1) of the *Electricity Act 1994* (the Electricity Act).

A retailer must charge its Standard Contract Customers, as defined in the Electricity Act, the notified prices subject to the provisions of sections 91, 91A and 91AA of the Electricity Act, sections 22(2) and 23(2) of the *National Energy Retail Law (Queensland) Act 2014*, and sections 22A(2), 64D(2) and 64J(2) of the *National Energy Retail Law*.

Pursuant to the Certificate of Delegation from the Minister for Energy and Water Supply (dated 30 November 2015) and sections 90(2), 90(3)(a) and 90AB of the Electricity Act, I hereby state that the Queensland Competition Authority decided that, on and from 1 July 2016, the notified prices are the applicable prices set out in the attached Tariff Schedule.

The Tariff Schedule does not apply to any customers in Energex Limited's distribution area as from 1 July 2016, customers in this area do not have access to notified prices.

Eligible customers may access the transitional tariffs in Part 2 of the Tariff Schedule. These tariffs will be available for a set period of time as a transitional measure to assist customers in moving to the standard business tariffs in the future. Customers on the transitional tariffs may opt to transfer to the standard business tariffs in Part 1 of the Tariff Schedule at any time, subject to eligibility requirements.

This Tariff Schedule does not apply to Standard Contract Customers supplied by Origin Energy Electricity Limited connected to Essential Energy's New South Wales network (which extends into southern Queensland). These customers will generally pay no more for electricity than other Queensland Standard Contract Customers of similar usage categories or classes.

As required by section 90AB(4) of the Electricity Act, the notified prices are exclusive of the goods and services tax ('GST') payable under the *A New Tax System (Goods and Services Tax) Act 1999* (Cth) (the GST Act).

In addition to the applicable tariff, a retailer may charge a Standard Contract Customer an additional amount in accordance with a program or scheme for the purchase of electricity from renewable or environmentally-friendly sources (whether or not that additional amount is calculated on the basis of the customer's electricity usage), but only if –

(a) the customer voluntarily participates in such program or scheme;

(b) the additional amount is payable under the program or scheme; and

(c) the retailer gives the customer prior written notice of any change to the additional amount payable under the program or scheme.

Dated this 31st day of May 2016.

Roy Green, Chairman
Queensland Competition Authority

TARIFF SCHEDULE

Note 1: For the purposes of sections 90, 91, 91A and 91AA of the Electricity Act, the tariffs and other retail fees and charges in this Tariff Schedule are exclusive of GST payable under the GST Act.

Note 2: This Tariff Schedule replaces the Tariff Schedule published in the Queensland Government Gazette on 18 June 2015.

Note 3: This Tariff Schedule is structured in several Parts:

- Parts 1 to 5 (inclusive) apply to eligible Standard Contract Customers in Ergon Energy Corporation Limited distribution area, and large customers on a Standard Contract of Ergon Energy Queensland Pty Ltd; and
- Part 6 applies to eligible Standard Contract Customers of Ergon Energy Queensland Pty Ltd. Eligible customers of other retailers may apply directly to the Department of Energy and Water Supply for relief from electricity charges if a drought declaration is in force – see Part 6 for more detail.

Note 4: To ensure the correct application of the tariffs set out in this Tariff Schedule, the retailer and the customer must have regard to Part 4 (Application of Tariffs for Customers on Notified Prices – General).

Note 5: Any reference in this Tariff Schedule to a time is a reference to Eastern Standard Time.

Note 6: "NMI" means the National Metering Identifier and is applicable to the point at which a premises is connected to a distribution entity's network.

Note 7: A primary tariff is the tariff that reflects the primary use of the premises or the majority of the load, and is capable of existing by itself against a NMI. A secondary tariff is any other tariff.

Note 8: Only days that supply is connected are to be counted for billing of charges.

Note 9: A service fee is a fixed amount charged daily to cover the costs of maintaining electricity supply to a premises, including the costs associated with the provision of equipment and general administration. Retailers may use different terms for this charge, including Service Charge, Daily Supply Charge and Service to Property Charge.

Note 10: From 1 July 2015, metering charges are no longer included in notified prices. Metering charges will now be applied in addition to the notified prices contained in this gazette.

Note 11: Unless otherwise defined, the terminology used in this Tariff Schedule is intended to be consistent with the energy laws.

Part 1

TARIFFS FOR RESIDENTIAL, COMMERCIAL AND RURAL APPLICATIONS

***Tariff 11* – Residential (Lighting, Power and Continuous Water Heating) –**

This tariff is applicable to a customer who is classified as residential by the relevant retailer and can be accessed by a business customer consuming less than 100MWh per annum providing it is in conjunction with a primary business tariff (Tariff 20, 21, 22, 22A, 24, 41, 62, 65 or 66) at the same NMI.

This tariff is also applicable to electricity used in separately metered common sections of residential premises consisting of more than one flat or home unit.

This tariff cannot be used in conjunction with Tariff 12A (Residential) (Time-of-Use) or Tariff 14 (Residential) (Seasonal Time-of-Use Demand) at the same NMI.

Where a NMI has multiple meters, the usage for all meters that record usage for Tariff 11 will be aggregated for billing purposes.

No large customers are eligible for this tariff.

All usage	**24.610 c/kWh**
plus a Service Fee per metering point per day of	**89.572 c**

Further applications of this tariff are described in Part 4 (Application of Tariffs for Customers on Notified Prices – General) and Part 5 (Concessional Applications of Tariffs 11, 12A and 14 (Residential)).

***Tariff 12A* – Residential (Lighting, Power and Continuous Water Heating) (Time-of-Use) –**

This tariff is applicable to a customer in Ergon Energy Corporation Limited's distribution area who is classified as residential by the relevant retailer and can be accessed by a business customer consuming less than 100MWh per annum providing it is in conjunction with a primary business tariff (Tariff 20, 21, 22, 22A, 24, 41, 62, 65 or 66) at the same NMI.

This tariff is also applicable to electricity used in separately metered common sections of residential premises consisting of more than one flat or home unit.

This tariff cannot be used in conjunction with Tariff 11 or 14 (Residential) at the same NMI.

Where a NMI has multiple meters, the usage for all meters that record usage for Tariff 12A will be aggregated for billing purposes.

No large customers are eligible for this tariff.

Customers must have the appropriate metering installed in order to access this tariff.

Usage during Summer (December, January and February):

Peak
Electricity used between 3:00pm and 9:30pm inclusive any day of the week **55.865 c/kWh**

Off-peak
All other times **19.859 c/kWh**

Non-summer usage (March - November)
All usage **19.859 c/kWh**

plus a Service Fee per metering point per day of **101.306 c**

Further applications of this tariff are described in Part 4 (Application of Tariffs for Customers on Notified Prices – General) and Part 5 (Concessional Applications of Tariffs 11, 12A and 14 (Residential)).

Tariff 14 **– Residential (Seasonal Time-of-Use Demand) –**

This tariff is applicable to a customer in Ergon Energy Corporation Limited's distribution area who is classified as residential by the relevant retailer.

Customers must have the appropriate metering installed in order to access this tariff. Where a NMI has multiple meters, the usage for all meters that record usage for Tariff 14 will be aggregated for billing purposes.

This tariff is available at the absolute discretion of the retailer and the distribution entity.

Demand Charges

'Demand' refers to the import demand in kilowatts (No adjustment to import demand is made for export to the distribution network).

Peak Demand - demand between 3:00pm and 9:30pm, any day of the week, in summer months (December, January and February).

Off Peak Demand - demand between 3:00pm and 9:30pm, any day of the week, in non-summer months (March to November inclusive).

Peak Demand Calculation

Summer demand charges are calculated using the customer's top 4 demand days. The daily demand is based on the average demand the customer places on the network in the daily peak demand window (the 6.5 hour peak period on any day between 3.00 pm and 9.30 pm).

The peak demand charge will be applied to average kW demand calculated for the 52 half hour periods each month (i.e. 13 half hour intervals in each demand window on the 4 highest demand days)

$61.790 per kilowatt per month of chargeable peak demand.

Off Peak Demand Calculation

Non summer demand charges are calculated using the customers top 4 demand days. The daily demand is based on the average demand the customer places on the network in the daily demand window (the 6.5 hour peak period on any day between 3.00 pm and 9.30 pm).

The off peak demand charge will be applied to average kW demand calculated for the 52 half hour periods each month (i.e. 13 half hour intervals in each demand window on the 4 highest demand days)

The off peak demand quantity is subject to a minimum chargeable demand of 3kW. The off peak demand charge does not apply in summer months.

$11.258 per kilowatt per month of chargeable off-peak demand.

All usage **14.984 c/kWh**

plus a Service Fee per metering point per day of **60.514 c**

Further applications of this tariff are described in Part 4 (Application of Tariffs for Customers on Notified Prices – General) and Part 5 (Concessional Applications of Tariffs 11, 12A and 14 (Residential)).

Tariff 20 **– Business General Supply –**

This tariff cannot be accessed by large customers. Refer Part 2 for transitional tariffs for existing large customers.

Residential customers can access this tariff providing:

- the electricity is used in separately metered common sections of residential premises consisting of more than one flat or home unit; or
- it is in conjunction with a primary residential tariff at the same NMI.

All usage **25.968 c/kWh**

plus a Service Fee per metering point per day of **127.879 c**

Tariff 22 **– Business General Supply – Time-of-Use –**

This tariff will be phased out no later than 30 June 2017 and no new customers will be supplied under this tariff. It is available only to customers taking supply under Tariff 22 at 30 June 2015.

This tariff cannot be accessed by large customers. Refer Part 2 for transitional tariffs for existing large customers.

Residential customers can access this tariff providing:

- the electricity is used in separately metered common sections of residential premises consisting of more than one flat or home unit; or
- it is in conjunction with a primary residential tariff at the same NMI.

Customers must have the appropriate metering installed in order to access this tariff.

For electricity used between the hours of 7.00 am and 9.00 pm, Monday to Friday inclusive -

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All usage	**28.229 c/kWh**

For electricity used at other times -

All usage	**22.648 c/kWh**

plus a Service Fee per metering point per day of **127.879 c**

Tariff 22A – Business General Supply – Time of Use

This tariff is applicable to business customers consuming less than 100MWh per annum in Ergon Energy Corporation Limited's distribution area. This tariff cannot be accessed by large customers. Refer Part 2 for transitional tariffs for existing large customers.

Customers must have the appropriate metering installed in order to access this tariff.

Usage during Summer (December, January and February):

Peak Electricity used between 10:00am and 8:00pm inclusive on weekdays	**47.258 c/kWh**
Off-peak All other times	**23.303 c/kWh**

Non-summer usage (March - November)

All usage	**23.303 c/kWh**

plus a Service Fee per metering point per day of **127.879 c**

***Tariff 24* – Business (Seasonal Time-of-Use Demand)**

This tariff is applicable to a customer in Ergon Energy Corporation Limited's distribution area who is classified as business by the relevant retailer. The tariff cannot be accessed by large customers.

Customers must have the appropriate metering installed in order to access this tariff. Where a NMI has multiple meters, the usage for all meters that record usage for Tariff 24 will be aggregated for billing purposes.

This tariff is available at the absolute discretion of the retailer and the distribution entity.

Demand Charges –

'Demand' refers to the import demand in kilowatts (No adjustment to import demand is made for export to the distribution network).

Peak Demand – demand between 10:00am and 8:00pm weekdays (Monday to Friday) in summer months (December, January and February)

Off Peak Demand - demand between 10:00am and 8:00pm weekdays (Monday to Friday) in non-summer months (March to November inclusive).

Peak Demand Calculation

Summer demand charges are calculated using the customers top 4 demand days. The daily demand is based on the average demand the customer places on the network in the daily peak demand window (the 10 hour peak period on any working day between 10.00 am and 8.00 pm).

The peak demand charge will be applied to average kW demand calculated for the 80 half hour periods each month (i.e. 20 half hour intervals in each demand window on the 4 highest demand days)

$84.804 per kilowatt per month of chargeable peak demand.

Off Peak Demand Calculation

Non summer demand charges are calculated using the customer's top 4 demand days. The daily demand is based on the average demand the customer places on the network in the daily demand window (the 10 hour peak period on any working day between 10.00 am and 8.00 pm).

The off peak demand charge will be applied to average kW demand calculated for the 80 half hour periods each month (i.e. 20 half hour intervals in each demand window on the 4 highest demand days)

The off peak demand quantity is subject to a minimum chargeable demand of 3kW. The off peak demand charge does not apply in summer months.

$13.935 per kilowatt per month of chargeable off-peak demand.

Energy Charge

All usage	**16.299 c/kWh**

plus a Service Fee per metering point per day of **78.046 c**

Further applications of this tariff are described in Part 4 (Application of Tariffs for Customers on Notified Prices – General).

***Tariff 31* – Night Rate (Super Economy) –**

Eligible customers can access this tariff providing it is in conjunction with a residential or business tariff at the same NMI at the discretion of the distribution entity.

This tariff is not available to large customers in Ergon Energy Corporation Limited's distribution area.

This tariff is applicable when electricity supply is:

- permanently connected to apparatus; or
- connected to apparatus by means of a socket-outlet as approved by the distribution entity; or
- permanently connected to specified parts of apparatus;

as set out below (but not applicable, except as described in (c) below, if provision has been made to supply such apparatus or the specified part thereof under a different tariff during the restricted period) -

(a) Electric storage water heaters with thermostatically controlled or continuously operating heating units and which comply with the construction and performance requirements of Australian Standard 1361 or 1056 or previous Standards superseded by these two Standards or similar electric water heaters which are approved for connection by the distribution entity.

Where the heating unit rating exceeds 1,800 watts, it shall not exceed 13.5 watts per litre of heat storage volume for heat exchange type water heaters or 15.5 watts per litre of rated hot water delivery for other storage type water heaters.

The following conditions shall apply to any booster heating unit fitted -

(i) its rating shall not exceed that of the main heating unit;

(ii) it shall be connected so as to prevent it being energised simultaneously with the main heating unit;

(iii) electricity used by the booster heating unit shall be metered under and charged at the tariff applicable to general power usage at the premises concerned;

(iv) it shall be located in accordance with the provisions of the above Standards.

(b) Solar-heated water heaters. Where the electric heating unit rating exceeds 1,800 watts, it shall not exceed 13.5 watts per litre of storage tank capacity. If a circulating water pump is fitted to the system, continuous supply will be available to the pump, and electricity used shall be metered under and charged at the tariff applicable to general power usage at the premises concerned.

(c) One-shot boost for solar-heated water heaters with electric heating units as described in (b) above. A current held changeover relay may be fitted to the water heater to deliver, at the customer's convenience, a 'one-shot boost' supply to the electric heating element at times when supply is not available under this Tariff 31 (generally between the hours of 7.00 am and 10.00 pm). Such supply is subject to thermostatically controlled switchoff. Electricity used during operation of the one-shot boost shall be metered under and charged at the tariff applicable to general power usage at the premises concerned. Supply and installation of a current held changeover relay, including the cost of same, is the responsibility of the customer.

(Reference in this Tariff Schedule to a 'booster heating unit' does not mean a current held changeover relay which is capable of delivering a 'one-shot boost'.)

(d) Heat pump water heaters. Where the rated electrical input, as shown on the nameplate, exceeds 1,800 watts, it shall not exceed 13.5 watts per litre of storage tank capacity.

(e) Heatbanks. Booster heating units are permitted in heatbanks in which the main element rating is at least 2 kilowatts. The following conditions shall apply to any booster heating unit fitted –

(i) its rating shall not exceed 70 percent of the rating of the main heating unit;

(ii) it shall be connected so as to prevent it being energised simultaneously with the main heating unit;

(iii) electricity used by the booster heating unit shall be metered under and charged at the tariff applicable to general power usage at the premises concerned.

(f) Electric Vehicles, at the discretion of the distributor.

(g) Loads other than water heaters and heatbanks, but is not applicable -

(i) to arc or resistance welding plant;

(ii) where the apparatus is duplicated in order that supply may be obtained on a different tariff for the same purpose during the restricted period.

The distribution entity will provide and install load control equipment. Charges may apply for distribution services associated with the load control equipment, where the costs of the requested service are not included in the distribution entity's network charges.

Supply will be available for a minimum of 8 hours per day, but the times when supply is available is subject to variation at the absolute discretion of the distribution entity. In general, this supply will be between the hours of 10.00 pm and 7.00 am.

All usage **14.423 c/kWh**

Tariff 33 **– Controlled Supply (Economy) –**

Eligible customers can access this tariff providing it is in conjunction with a residential or business tariff at the same NMI at the discretion of the distribution entity.

This tariff is not available to large customers or in conjunction with Tariff 24 in Ergon Energy Corporation Limited's distribution area.

This tariff is applicable when electricity supply is:

(a) connected to apparatus (e.g. pool filtration system) by means of a socket-outlet as approved by the distribution entity; or

(b) permanently connected to apparatus as set out below (but not applicable if provision has been made to supply such apparatus under a different tariff in the periods during which supply is not available under this tariff) –

(i) Electric storage water heaters with thermostatically controlled or continuously operating heating units and which comply with the construction and performance requirements of Australian Standard 1361 or 1056 or previous Standards superseded by these two Standards or similar electric water heaters which are approved for connection by the distribution entity.

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Where the heating unit rating exceeds 1,800 watts, it shall not exceed 13.5 watts per litre of heat storage volume for heat exchange type water heaters or 15.5 watts per litre of rated hot water delivery for other storage type water heaters.

(ii) Solar-heated water heaters. Where the electric heating unit rating exceeds 1,800 watts, it shall not exceed 13.5 watts per litre of storage tank capacity.

(iii) Heat pump water heaters. Where the rated electrical input, as shown on the nameplate, exceeds 1,800 watts, it shall not exceed 13.5 watts per litre of storage tank capacity.

(iv) Electric Vehicles, at the discretion of the distributor.

(v) As a sole supply tariff at the absolute discretion of the distribution entity.

(vi) Other individual loads in domestic installations, but is not applicable –

- to arc or resistance welding plant;
- where the apparatus is duplicated in order that supply may be obtained on a different tariff for the same purpose during the restricted period.

The distribution entity will provide and install load control equipment. Charges may apply for distribution services associated with the load control equipment, where the costs of the requested service are not included in the distribution entity's network charges.

Supply will be available for a minimum of 18 hours per day, but the times when supply is available is subject to variation at the absolute discretion of the distribution entity.

All usage **19.960 c/kWh**

Tariff 41 **– Business Low Voltage General Supply (Demand) –**

This tariff cannot be accessed by large customers. Refer Part 2 for transitional tariffs for large customers.

Demand Charge –

$28.841 per kilowatt per month of chargeable demand.

Energy Charge –

All usage **13.615 c/kWh**

plus a Service Fee per metering point per day of **610.984 c**

The chargeable demand in any month shall be the maximum demand recorded in that month.

'Demand' shall mean the average demand over a period of 30 minutes, as measured on the distribution entity's meters. .

Customers must have the appropriate metering installed in order to access this tariff.

Tariff 44 **– Business Over 100MWh per annum (Demand Small)**

This tariff can be accessed by customers classified as SAC >100MWh per annum by the distribution entity. The tariff is based on the Ergon Energy Corporation Limited network tariff of Demand Small.

A Standard Asset Customer - Large (SAC - Large) is a customer in Ergon Energy Corporation Limited's distribution area whose annual energy usage generally exceeds 100MWh.

This tariff cannot be used in conjunction with any other tariff at that NMI.

Demand Charge –

$39.863 per kilowatt per month of chargeable demand.

Energy Charge –

All usage **12.302 c/kWh**

plus a Service Fee per metering point per day of **5,314.202 c**

The chargeable demand charge in any month will be the kW amount by which a customer's metered monthly maximum demand is greater than the demand threshold applicable to this tariff which is 30 kW.

Where the monthly metered maximum demand is less than the demand threshold, the chargeable demand is set to zero and no demand charge is payable for that month.

'Demand' shall mean the average demand in kilowatts over a period of 30 minutes, as measured on the meters at that NMI.

Customers must have the appropriate metering installed in order to access this tariff.

Tariff 45 **– Business Over 100MWh per annum (Demand Medium)**

This tariff can be accessed by customers classified as SAC >100MWh per annum by the distribution entity. The tariff is based on the Ergon Energy Corporation Limited network tariff of Demand Medium.

A Standard Asset Customer - Large (SAC - Large) is a customer in Ergon Energy Corporation Limited's distribution area whose annual energy usage generally exceeds 100MWh.

This tariff cannot be used in conjunction with any other tariff at that NMI

Demand Charge –

$31.647 per kilowatt per month of chargeable demand.

Energy Charge –

All usage **12.393 c/kWh**

plus a Service Fee per metering point per day of **16,662.167 c**

The chargeable demand charge in any month will be the kW amount by which a customer's metered monthly maximum demand is greater than the demand threshold applicable to this tariff which is 120kW.

Where the monthly metered maximum demand is less than the demand threshold, the chargeable demand is set to zero and no demand charge is payable for that month.

'Demand' shall mean the average demand in kilowatts over a period of 30 minutes, as measured on the meters at that NMI.

Customers must have the appropriate metering installed in order to access this tariff.

***Tariff 46* – Business Over 100MWh per annum (Demand Large)**

This tariff can be accessed by customers classified as SAC >100MWh per annum by the distribution entity. The tariff is based on the Ergon Energy Corporation Limited network tariff of Demand Large.

A Standard Asset Customer - Large (SAC - Large) is a customer in Ergon Energy Corporation Limited's distribution area whose annual energy usage generally exceeds 100MWh.

This tariff cannot be used in conjunction with any other tariff at that NMI

Demand Charge –

$28.123 per kilowatt per month of chargeable demand.

Energy Charge –

All usage	**12.599 c/kWh**
plus a Service Fee per metering point per day of	**44,351.904 c**

The chargeable demand charge in any month will be applied to the kW amount by which a customer's metered monthly maximum demand is greater than the demand threshold applicable to this tariff which is 400 kW.

Where the monthly metered maximum demand is less than the demand threshold, the chargeable demand is set to zero and no demand charge is payable for that month.

'Demand' shall mean the average demand in kilowatts over a period of 30 minutes, as measured on the meters at that NMI.

Customers must have the appropriate metering installed in order to access this tariff.

Tariff 47 – Business - High Voltage General Supply (Demand)

This tariff can be accessed by customers classified as SAC >100MWh per annum by the distribution entity. The tariff is based on the Ergon Energy Corporation Limited network tariff of Demand High Voltage.

A Standard Asset Customer - Large (SAC - Large) is a customer in Ergon Energy Corporation Limited's distribution area whose annual energy usage generally exceeds 100MWh.

This tariff cannot be used in conjunction with any other tariff at that NMI.

This tariff cannot be accessed by large customers who are classified as Connection Asset Customers or Individually Calculated Customers by the distribution entity.

Demand Charge –

$25.896 per kilowatt per month of chargeable demand.

Energy Charge –

All usage	**11.567 c/kWh**
plus a Service Fee per metering point per day of	**41,533.203 c**

The chargeable demand charge in any month will be applied to the kW amount by which a customer's metered monthly maximum demand is greater than the demand threshold applicable to this tariff which is 400 kW.

Where the monthly metered maximum demand is less than the demand threshold, the chargeable demand is set to zero and no demand charge is payable for that month.

'Demand' shall mean the average demand in kilowatts over a period of 30 minutes, as measured on the meters at that NMI.

Supply under this tariff will be at a standard high voltage, the level of which shall be prescribed by the distribution entity. Credits for high voltage supply are not applicable to this tariff.

Customers must have the appropriate metering installed in order to access this tariff.

***Tariff 48* – Business - General Supply (>4 Gigawatt Hours (GWh)) (Demand)**

This tariff can only be accessed by large customers who are classified as Connection Asset Customers or Individually Calculated Customers by the distribution entity. The tariff is based on the Ergon Energy Corporation Limited network tariff of Demand High Voltage.

A Connection Asset Customer is a large business customer in Ergon Energy Corporation Limited's distribution area whose annual energy usage generally exceeds 4GWh.

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An Individually Calculated Customer is a large business customer in Ergon Energy Corporation Limited's distribution area whose annual energy usage generally exceeds 40GWh.

This tariff cannot be used in conjunction with any other tariff at that NMI.

Demand Charge –

$25.896 per kilowatt per month of chargeable demand.

Energy Charge –

All usage **11.567 c/kWh**

plus a Service Fee per metering point per day of **41,969.578 c**

The chargeable demand charge in any month will be applied to the kW amount by which a customer's metered monthly maximum demand is greater than the demand threshold applicable to this tariff which is 400 kW.

Where the monthly metered maximum demand is less than the demand threshold, the chargeable demand is set to zero and no demand charge is payable for that month.

'Demand' shall mean the average demand in kilowatts over a period of 30 minutes, as measured on the meters at that NMI. Credits for high voltage supply are not applicable to this tariff.

Customers must have the appropriate metering installed in order to access this tariff.

Tariff 50 – Business - Seasonal Time of Use Demand (over 100MWh per annum)

This tariff can be accessed by customers classified as SAC >100MWh per annum by the distribution entity. The tariff is based on the Ergon Energy Corporation Limited network tariff of Seasonal Time of Use Demand for SAC Large.

A SAC - Large customer is a customer in Ergon Energy Corporation Limited's distribution area whose annual energy usage generally exceeds 100MWh.

This tariff cannot be used in conjunction with any other tariff at that NMI.

Customers must have the appropriate metering installed in order to access this tariff.

The chargeable demand charge for peak periods in any summer month (December, January or February) will be applied to the kW amount by which a customer's metered monthly maximum demand is greater than the demand threshold of 20 kW.

The chargeable demand charge for all other months (ie from March through to November) will be applied to the kW amount by which a customer's metered monthly maximum demand is greater than the demand threshold of 40 kW.

Where the monthly metered maximum demand is less than the demand threshold, the chargeable demand is set to zero and no demand charge is payable for that time period of that month.

'Demand' shall mean the average demand in kilowatts over a period of 30 minutes, as measured on the meters at that NMI.

Demand Charges –

Summer Demand (December, January and February)
Weekdays 10:00am to 8:00pm

$61.203 per kilowatt per month of maximum metered demand exceeding 20 kilowatts.

Non-summer demand (March to November)

$14.761 per kilowatt per month of maximum metered demand exceeding 40 kilowatts.

Energy Charge –

All usage during summer months (December, January and February) **11.832 c/kWh**

All usage during non-summer months (March to November) **15.266 c/kWh**

plus a Service Fee per metering point per day of **4,493.324 c**

Part 2

TRANSITIONAL TARIFFS FOR NEW AND EXISTING CUSTOMERS

The following tariffs are available as a transitional measure to assist new and existing customers in moving to standard business tariffs in the future. Transitional tariffs will be phased out no later than 30 June 2020.

***Tariff 20 (Large)* – Business General Supply (Transitional)**

This transitional tariff is available to large customers in Ergon Energy Corporation Limited's distribution area and will be phased out no later than 30 June 2020.

This tariff cannot be accessed by small customers.

All usage **34.940 c/kWh**

plus a Service Fee per metering point per day of **71.429 c**

***Tariff 21* – Business General Supply (Transitional)**

This transitional tariff will be phased out no later than 30 June 2020.

This tariff can only be accessed by a residential customer if it is in conjunction with a primary residential tariff at the same NMI.

This tariff shall not apply in conjunction with Tariff 20, 22, 22A, 24 or 62.

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First 100 kilowatt hours per month	**46.962 c/kWh**
Next 9,900 kilowatt hours per month	**44.124 c/kWh**
Remaining kilowatt hours per month	**33.590 c/kWh**
plus a Minimum Payment per day of	**69.107 c**

Tariff 22 - (Small and Large) **– Business General Supply – Time-of-Use (Transitional)**

This transitional tariff will be phased out no later than 30 June 2020.

This tariff can only be accessed by a residential customer if it is in conjunction with a primary residential tariff at the same NMI.

Customers must have the appropriate metering installed in order to access this tariff.

For electricity used between the hours of 7.00 am and 9.00 pm, Monday to Friday inclusive -

All usage	**46.301 c/kWh**

For electricity used at other times -

All usage	**16.304 c/kWh**
plus a Service Fee per metering point per day of	**171.670 c**

Tariff 37 **– Non-Domestic Heating – Time-of-Use (Obsolescent) –**

This tariff will be phased out no later than 30 June 2020. No new customers will be supplied under this tariff. It is available only to customers taking supply under Tariff 37 at 30 June 2007.

Applicable to permanently connected –

(a) Electric storage water heaters in non-domestic installations with thermostatically controlled or continuously operating heating units and which comply with the construction and performance requirements of Australian Standard 1361 or 1056 or previous Standards superseded by these two Standards or similar electric water heaters which are approved for connection by the distribution entity.

The heating unit rating shall not exceed 40.5 watts per litre of heat storage volume for heat exchange type water heaters or 46.5 watts per litre of rated hot water delivery for other storage type water heaters.

(b) Apparatus for the production of steam.

(c) Heating loads other than (a) and (b) above. The minimum total connected load under this section of this tariff is 4 kilowatts. Supplementary load that is permanently connected as an integral part of the installation may be supplied under this section provided that the aggregated rating of such supplementary load does not exceed 10 percent of the heating load.

For electricity used between the hours of 4.30 pm and 10.30 pm	**50.691 c/kWh**
For electricity used between the hours of 10.30 pm and 4.30 pm	**20.267 c/kWh**
Minimum Payment per day of	**28.460 c**

Tariff 62 **- Farm - Time-of-Use (Transitional)**

This transitional tariff will be phased out no later than 30 June 2020.

This tariff can only be accessed by a residential customer if it is in conjunction with a primary residential tariff at the same NMI.

This tariff shall not apply in conjunction with Tariff 20, 21, 22 22A or 24 at the same NMI.

For electricity used between the hours of 7.00 am and 9.00 pm, Monday to Friday inclusive –

First 10,000 kilowatt hours per month	**44.259 c/kWh**
Remaining kilowatt hours	**37.427 c/kWh**

For electricity used at other times -

All usage	**15.650 c/kWh**
plus a Service Fee per metering point per day of	**74.644 c**

Tariff 65 **- Irrigation - Time-of-Use (Transitional)**

This transitional tariff will be phased out no later than 30 June 2020.

This tariff can only be accessed by a residential customer if it is in conjunction with a primary residential tariff at the same NMI.

For electricity used in a fixed 12 hour daily pricing period (as agreed between the retailer and the customer from the range 7.00 am to 7.00 pm; 7.30 am to 7.30 pm; or 8.00 am to 8.00 pm) Monday to Sunday inclusive -

All usage	**35.305 c/kWh**

For electricity used at other times –

All usage	**19.446 c/kWh**
plus a Service Fee per metering point per day of	**74.644 c**

No alteration to the selected daily pricing period shall be permitted until a period of twelve months has elapsed from the previous selection.

***Tariff 66* – Irrigation (Transitional)**

This transitional tariff will be phased out no later than 30 June 2020.

This tariff can only be accessed by a residential customer if it is in conjunction with a primary residential tariff at the same NMI.

Annual Fixed Charge (in respect of each point of supply) - per kilowatt of connected motor capacity used for irrigation pumping –

First 7.5 kilowatts	**$35.888 per kW**
Remaining kilowatts	**$107.903 per kW**

Energy Charge –

All usage	**18.505 c/kWh**
plus a Service Fee per metering point per day of	**164.512 c**

Minimum Annual Fixed Charge - As calculated for 7.5 kW (Note – 7.5 kW is equivalent to 10.05 h.p.)

Any customer taking supply under this tariff who requests a temporary disconnection will not be reconnected unless the outstanding balance of the Annual Fixed Charge for part of the year corresponding to the period of disconnection has been paid.

Part 3

TARIFFS FOR UNMETERED SUPPLY INCLUDING STREET LIGHTS, TRAFFIC SIGNALS, WATCHMAN LIGHTING AND TEMPORARY SERVICES

***Tariff 71* – Street Lights –**

Notified prices for Tariff 71, published in accordance with section 90 of the Electricity Act, will only apply in Ergon Energy Corporation Limited's distribution area.

Street lighting customers are as defined in Queensland legislative instruments, being State or local government agencies for street lighting loads.

Street lights are deemed to illuminate roads. In Queensland, there are two main types of roads, being:

- **Local government roads** – roads for which a local government has control. These roads comprise land that is:
  - dedicated to public use as a road; or
  - developed for (or has as one of its main uses) the driving or riding of motor vehicles and is open to, or used by, the public; or
  - a footpath or bicycle path; or
  - a bridge, culvert, ford, tunnel or viaduct,

  and excludes State-controlled roads and public thoroughfare easements; and
- **State-controlled roads** – roads that are declared under the *Transport Infrastructure Act 1994* (Qld) to be a State-controlled road, for which the relevant Minister for that Act has control (i.e. of the Department of Transport and Main Roads).

All usage will be determined in accordance with the metrology procedure issued by the Australian Energy Market Operator.

All usage	**31.503 c/kWh**
plus a Service Fee per lamp per day of	**0.735 c**

***Tariff 91* - Other Unmetered Supply –**

Unmetered electricity supply is available to other small loads, as approved by the distribution entity

Unmetered Supply applies where:
1. the load pattern is predictable;
2. for the purposes of settlements, the load pattern (including load and on/off time) can be reasonably calculated by a relevant method set out in the metrology procedure; and
3. it would not be cost effective to meter the connection point taking into account:
   (i) the small magnitude of the load;
   (ii) the connection arrangements; and
   (iii) the geographical and physical location.

Charges are based on usage determined by the distribution entity.

All usage	**23.376 c/kWh**

Charges for installation, maintenance and removal of supply to an unmetered installation may apply in addition to the above charge for electricity supplied. These charges are unregulated.

Part 4

APPLICATION OF TARIFFS FOR CUSTOMERS ON NOTIFIED PRICES – GENERAL

Standard Contract Customers may choose to be charged on any of the tariffs that the retailer agrees are applicable to the customer's installation and provided that appropriate metering is in place.

Tariffs are applied to the electricity used at a connection point (as identified by a National Metering Identifier or NMI), as measured by the meter or meters at that connection point. The distribution entity is responsible for the establishment of connection points. Whilst customers have the ability to, at their expense if applicable, request additional meters at their connection point to enable particular tariff arrangements, the distribution entity will only create a new connection point where they have a legislative right or obligation to do so.

If there has been a material change of use at the customer's premises, such that the tariff on which the customer is being charged is no longer applicable, the retailer may require the customer to transfer to a tariff applicable to the changed use.

If a change to the customer's meter is required to support the applicability of a tariff to a customer, the customer may request the retailer to arrange for the required meter to be installed at the customer's cost.

For all tariffs customers have the option, on application in writing or another form acceptable to the retailer, of changing to any other tariff that the retailer agrees is applicable to the customer's installation. Customers shall not be entitled to a further option of changing to another tariff until a period of twelve months has elapsed from a previous exercise of option. However, a retailer at the request of a customer may permit a change to another tariff within a period of twelve months if –

(i) a tariff that was not previously in force is offered and such tariff is applicable to the customer's installation;
or
(ii) the change does not require a change to the customer's network tariff and the customer meets certain costs associated with changing to another tariff;

Customers previously supplied under tariffs which have now been discontinued or redesignated (whether by number, letter or name) in their distribution area will be supplied under other tariffs appropriate to their installations.

The date of effect of a tariff change will be:

- for customers previously supplied under tariffs which have now been discontinued or redesignated (whether by number, letter or name) - the date the tariff is discontinued or redesignated; or
- the date of the last meter read (provided it is an actual meter read, not an estimated meter read); or
- if field work is required to support the change in tariff (e.g. a new meter is required to be installed), the date the field work is completed.

Billing information for application of monthly or annually based charges

The monthly or annual charges shall be calculated pro rata having regard to the number of days in the billing cycle that supply was connected (days) and one-twelfth of 365.25 days (to allow for leap years). That is:

$$Pa = \frac{P \times 12}{365.25} \text{ x days, for monthly charges}$$

$$Pa = \frac{P1}{365.25} \text{ x days, for annual charges}$$

Where Pa is the amount to be billed
P is the monthly charge
P1 is the annual charge
days is the number of days in the billing cycle that supply was connected

Supply Voltage

(a) Low Voltage

Except where otherwise stated, the tariffs in Parts 1 and 2 will apply to supply taken at low voltage (480/240 volts or 415/240 volts, 50 Hertz A.C., as required by the distribution entity).

(b) High Voltage

(i) Customer plant requirements

By agreement between the customer and the distribution entity, supply may be given and metered at a standard high voltage, the level of which shall be prescribed by the distribution entity.

Where high voltage supply is given, a customer shall supply and maintain all equipment including transformers and high voltage automatic circuit breakers but excepting meters and control apparatus beyond the customer's terminals.

(ii) Credits where L.V. tariff is metered at H.V.

Where supply is given in accordance with (i) above and metered at high voltage then, except in cases where high voltage tariffs are determined or provided by agreement to meet special circumstances, the tariffs applied will be those pertaining to supply at low voltage ("the relevant tariff"), EXCEPT THAT, after billing the energy and demand components of the tariff, a credit will be allowed of –

- 5 percent of the calculated tariff charge where supply is given at voltages of 11kV to 33 kV; and
- 8 percent of the calculated tariff charge where supply is given at voltages of 66 kV and above,

(provided that the calculated tariff charge after application of the credit must not be less than the Minimum Payment or other minimum charge calculated by applying the provisions of the relevant tariff.)

Card-operated Meters in Remote Communities

If a customer is an excluded customer (as defined in section 23 of the Electricity Act), the distribution entity may at its absolute discretion agree with:

(a) the relevant local government authority on behalf of the customer; and
(b) the customer's retailer, that the electricity used by the customer is to be measured and charged by means of a card-operated meter.

If, immediately prior to 1 July 2007, electricity being used by a customer at premises is being measured and charged by means of a card-operated meter, the electricity used at the premises may continue to be measured or charged by means of a card-operated meter.

The methodology for applying the appropriate tariffs to customers subject to card-operated meters is as follows:

(a) If electricity supplied to a residential customer is measured and charged by means of a card-operated meter:
    (i) for Tariff 11 (Residential – Lighting, Power and Continuous Water Heating), all usage shall be charged at the 'All usage' rate (**24.610 cents/kWh**), plus a Service Fee of **89.572 cents** per day shall apply;
    (ii) for Tariff 31 (Night Rate – Super Economy), all usage shall be charged at the 'All usage' rate (**14.423 cents/kWh**); and

(iii) for Tariff 33 (Controlled Supply – Economy), all usage shall be charged at the 'All usage' rate (**19.960 cents/kWh**).

(b) If electricity supplied to a business customer is measured and charged by means of a card operated meter, all usage shall be charged at the 'All usage' rate under Tariff 20 (General Supply) (**25.968 cents/kWh**), plus a Service Fee of **127.879 cents** per day shall apply.

Other Retail Fees and Charges

A retailer may charge its Standard Contract Customers the following:

(a) if, at a customer's request, the retailer provides historical billing data which is more than two years old – a maximum of **$30**;

(b) retailer's administration fee for a dishonoured payment – a maximum of **$15**; and

(c) financial institution fee for a dishonoured payment – no more than the **fee incurred** by the retailer.

Part 5

CONCESSIONAL APPLICATIONS OF TARIFFS 11, 12A and 14 (RESIDENTIAL)

In Ergon Energy Corporation Limited's distribution area Tariffs 11, Tariff 12A and Tariff 14 are available to customers where they satisfy the criteria set out in any one of A, B or C, below:

A. Those separately metered installations where all electricity used is used in connection with the provision of a Meals on Wheels service or for the preparation and serving of meals to the needy and for no other purpose.

B. Charitable residential institutions which comply with all the following requirements—

(a) Domestic Residential in Nature. The total installation, or that part supplied and separately metered, must be domestic residential (i.e. it must include the electricity usage of the cooking, eating, sleeping and bathing areas which are associated with the residential usage). Medical facilities, e.g. an infirmary, which are part of the complex may be included as part of the total installation; and

(b) Charitable and Non-Profit. The organisation must be:

(i) a deductible gift recipient under section 30-227(2) of the *Income Tax Assessment Act 1997* to which donations of $2.00 and upwards are tax deductible; and

(ii) a non-profit organisation that:

A. imposes no scheduled charge on the residents for the services or accommodation that is provided (i.e. organisations that provide emergency accommodation facilities for the needy); or

B. if scheduled charges are made for the services or accommodation provided, then all residents must be pensioners or, if not pensioners, persons eligible for subsidised care under the *Aged Care Act 1997* or the *National Health Act 1953*.

C. Organisations providing support and crisis accommodation which comply with the following requirements—

The organisation must:

(a) meet the eligibility criteria of the Specialist Homelessness Services (formerly known as Supported Accommodation Assistance Program) administered by the State Department of Housing and Public Works and is therefore eligible to be considered for funding under this program. (Funding provided to organisations under the Specialist Homelessness Services is subject to Part 3, Sections 10 to 13 inclusive, of the *Family Services Act 1987*); and

(b) be a deductible gift recipient under section 30-227(2) of the *Income Tax Assessment Act 1997* to which donations of $2.00 and upwards are tax deductible.

Part 6

RELIEF FROM ELECTRICITY CHARGES WHERE DROUGHT DECLARATION IN FORCE

Customers of Ergon Energy Queensland Pty Ltd

A Standard Contract Customer of Ergon Energy Queensland Pty Ltd who is a farmer in a drought declared area or whose property is individually drought declared under Queensland Government administrative processes may be eligible for one or more of the following forms of relief from electricity charges:

(A) Waiving of Fixed Charge Components of Electricity Charges

If a customer of Ergon Energy Queensland Pty Ltd who is a farmer in a drought declared area or whose property is individually drought declared, does not have access to, or has severely restricted access to, farm or irrigation water, the fixed components of the customer's electricity charges shall be waived. These fixed charge components include annual fixed charges under Tariff 66, service fees, and minimum payments, but exclude minimum demand charges.

Provided the drought declaration remains operative, the waiver applies to all eligible fixed charges applicable to any account being used for pumping water for farm or irrigation purposes. The waiver shall continue to apply until the drought declaration is revoked.

(B) Deferral of Payment

If a customer of Ergon Energy Queensland Pty Ltd who is a farmer in a drought declared area or whose property is individually drought declared cites financial difficulties as a result of the drought, the customer is entitled to defer payment of the customer's electricity accounts relating to farm usage.

Ergon Energy Queensland Pty Ltd may charge interest on deferred accounts. However, the rate of any interest charged must not be more than the Bank Bill reference

rate for 90 days, as published on the first business day of each quarter.

Subject to the maximum rate of interest that may be charged, the terms of the deferred payment and the repayment of deferred amounts following revocation of the drought declaration will be as agreed between Ergon Energy Queensland Pty Ltd and the customer concerned.

Eligibility for Relief

A customer of Ergon Energy Queensland Pty Ltd seeking relief from electricity charges on the basis that the customer is a farmer who is in a drought declared area or whose property is individually drought declared, must apply in writing to Ergon Energy Queensland Pty Ltd.

If required by Ergon Energy Queensland Pty Ltd, the customer must provide:

(a) evidence that the customer's property is in a drought declared area or is individually drought declared, including the effective date of such drought declaration;
(b) evidence of the water pumping restrictions applicable to the customer's property; and
(c) for tariffs other than Tariffs 62, 65 and 66, a Statutory Declaration stating the specific account(s), and that the connection is being used primarily for pumping water for farm or irrigation purposes; and/or
(d) a Statutory Declaration stating that the customer is experiencing financial difficulties as a result of the drought, the specific account(s) and that the connection is being used primarily for farm purposes.

Customers of other retailers

Customers of retailers other than Ergon Energy Queensland Pty Ltd who are farmers in drought declared areas or who have a property which is individually drought declared under Queensland Government administrative processes and do not have access to, or have severely restricted access to, farm or irrigation water, can apply directly to the Department of Energy and Water Supply for reimbursement of the fixed charge components of the customer's electricity charges.

These fixed charge components include annual fixed charges under Tariff 66, service fees, and minimum payments, but exclude minimum demand charges.

Provided the drought declaration remains operative, the reimbursement applies to all eligible fixed charges applicable to any account being used for pumping water for farm or irrigation purposes and ceases once the drought declaration is revoked.

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APPENDIX H: ASSUMPTIONS USED TO DETERMINE CUSTOMER IMPACTS

Typical customer figures are based on the annual consumption of the median customer on each tariff in regional Queensland in the most recent tariff year (2014–15). The median customer is the middle customer in terms of consumption out of all customers on each tariff. As such, approximately half of all customers will use less electricity than the typical figure, and half will use more.

Stakeholders requested the QCA provide a range of bill impacts for residential customers. For this final determination the QCA has provided tariff 11 bill impacts for the 25th and 75th percentile customers. One quarter of customers will use less electricity than the 25th percentile customer, while three quarters of customers will use less electricity than the 75th percentile customer.

Ergon Retail provides these figures to the QCA.

Stakeholders noted that the typical customer figures provided by Ergon Retail appear lower than those on the Australian Energy Regulator's Energy Made Easy website. The reason for the discrepancy is that the Energy Made Easy website uses average consumption figures based on a survey of 4,000 customers across Australia in 2014, while Ergon Energy uses actual consumption figures from their customer base of over 700,000 electricity customers in regional Queensland.

Retail tariff	***Consumption (kWh per year)***	***Demand threshold (kW per month)***	***Demand (kW per month)***	***Peak usage (%)***	***Off-peak usage (%)***
Tariff 11 25th percentile (all customers)	2,055				
Tariff 11 median (all customers)	4,203				
Tariff 11 75th percentile (all customers)	6,412				
Tariff 11 median (for customers who also have Tariff 31)	4,372				
Tariff 31 median	1,792				
Tariff 11 median (for customers who also have Tariff 33)	3,989				
Tariff 33 median	1,666				
Tariff 12A median	4,915			10.6%	89.4%
Tariff 20 median	6,422				
Tariff 22[1] median	26,970			48.7%	51.3%
Tariff 22A median	15,169			11.1%	88.9%
Tariff 44 median	258,396	30	61		
Tariff 45 median	991,944	120	232		
Tariff 46 median	2,328,684	400	494		
Tariff 47 median	3,338,364	400	803		
Tariff 48 median	7,670,400	400	1,304		

1. Obsolete tariff

Source: Ergon Retail

APPENDIX I: SUMMARY OF CONCESSIONAL ARRANGEMENTS FOR ENERGY IN QUEENSLAND

Concession Name	***Eligibility Criteria***	***Annual Amount***
Electricity Rebate	Customers with a Pensioner Concession Card issued by either Centrelink or Department of Veterans' Affairs, a Department of Veterans' Affairs Gold Card (and recipient of the War Widow Pension or special rate TPI Pension) or a Queensland Government Seniors Card.	$320.97
Reticulated Natural Gas Rebate	As for Electricity Rebate.	$68.56
Medical Cooling and Heating Electricity Concession Scheme	Queensland residents with a qualifying medical condition requiring cooling or heating to prevent the decline of symptoms, who reside at their principal place of residence which has an air-conditioning unit.	$320.97
Home Energy Emergency Assistance Scheme	Customers must either hold a current, eligible concession card, or have a base income of no more than the Commonwealth Government's maximum income rate for part-age pensioners, or be on their retailer's hardship program or payment plan.	Up to $720 per household per year for a maximum of two consecutive years.
Electricity Life Support Concession Scheme	Customers must be medically assessed in accordance with the eligibility criteria determined by Queensland Health. In addition, oxygen concentrators must be provided rent-free by Queensland Health to persons who hold an eligible concession card and meet the eligibility criteria of the Medical Aids Subsidy Scheme. Kidney dialysis machines must be provided rent-free by Queensland Health to persons based on clinical needs and supplied through Queensland hospitals.	$653.72 per year for each oxygen concentrator; $437.76 for each kidney dialysis machine.
Drought relief	Certain farmers who use electricity for irrigation pumping during periods of very low or no water availability.	The fixed electricity charge is waived for Ergon Energy customers, and reimbursed by the Department of Energy and Water Supply for customers of other retail entities.

Note: Information current as of April 2016 and is provided as a guide only. Full details are available from: http://www.dews.qld.gov.au/energy-water-home/electricity/rebates.

APPENDIX J: RETAIL COST ALLOWANCES

This appendix provides details on how we have derived the retail cost allowances for 2016–17 notified prices, as set out in Chapter 5. Three issues are addressed here:

(1) deriving the final retail cost allowances from the results of ACIL's benchmarking analysis, specifically:

  (a) determining benchmark total retail cost allowances

  (b) determining the benchmark allocations between fixed and variable retail cost components

  (c) applying these allocations to fixed and variable components of retail tariffs

(2) estimating retail costs allowances for large and very large customer tariffs

(3) adjusting fixed retail costs for regulatory fees.

This appendix also addresses a number of retail-cost-related matters raised in response to our draft determination.

Deriving retail costs from ACIL's analysis

Total retail cost allowances for small customer tariffs

We have taken the average of all total retail cost observations derived from ACIL's benchmarking analysis, in each sample, for small business tariffs and residential tariffs. These averages represent averages across all data points in each sample (residential and small business); they do not represent averages of the total retail costs depicted in Figures 8 and 9 (Chapter 5). The total average retail cost allowances used to set our retail costs are set out in Table 35.

Table 35 Benchmark average retail costs—residential and small business customers

Customer class	*Fixed retail costs ($/annum)*	*Variable retail costs ($/annum)*	*Total retail costs ($/annum)*	*Fixed costs (as a % of total retail costs)*	*Variable costs (as a % of total retail costs)*
Residential	$127.93	$104.28	**$232.21**	55%	45%
Small business	$181.56	$422.23	**$603.79**	30%	70%

Note: Based on average annual consumption of 4,640 kWh for residential tariffs and 16,370 kWh for small business tariffs, as advised by Energex.

Allocation between fixed and variable retail components

After deciding on the total benchmark retail cost allowance, we then determine how that should be applied to retail tariffs.

ACIL's analysis reveals differences in how individual retailers recover retail costs from fixed and variable tariff components. For residential tariffs, the amount of total retail costs recovered through fixed charges ranges from 44 to 84 per cent across the sample. For small business tariffs, the allocation appears more biased toward recovery through variable components, with between 20 and 51 per cent of total retail costs recovered through fixed charges. Table 36 illustrates this variability across retailers' observations.

Table 36 Percentage of total retail costs recovered through fixed and variable components

Retailer	*Residential tariffs*		*Small business tariffs*	
	Fixed (%)	**Variable (%)**	**Fixed (%)**	**Variable (%)**
Simply	47%	53%	27%	73%
Energy Australia	75%	25%	24%	76%
Alinta	84%	16%	51%	49%
Origin	54%	46%	30%	70%
Red Energy	54%	46%	21%	79%
Lumo	44%	56%	40%	60%
M2	51%	49%	20%	80%
AGL	60%	40%	38%	62%
Momentum	55%	45%	31%	69%
Click	44%	56%	49%	51%
Minimum	44%	16%	20%	49%
Maximum	84%	56%	51%	80%

Notes: Based on ACIL's benchmarking analysis. These values represent the average recovery of retail costs from fixed and variable components, derived from the average of all market prices offered by each retailer.

This variation in how individual retailers recover their retail costs could be due to, among other things:

- underlying cost structures—for example, outsourcing of functions such as billing, customer service and energy trading could result in a different cost structure to a retailer that performs these functions in-house
- actual energy purchase costs—which are a function of the retailer's exposure to the spot market, its appetite for risk and its hedging strategy
- accounting and reporting policies—including capitalisation policies (for example, some retailers treat depreciation and amortisation as fixed costs, while others consider them variable costs) and different marketing strategies (for example, electing to offer discounts off fixed daily charges and usage charges, or usage charges alone).

Using the market observations, ACIL derived estimated benchmark allocations between fixed and variable components based on the mathematical relationship between the size of the two components. These relationships were derived using regression analysis which establishes a line of best fit through each normalised sample. These relationships are discussed further in ACIL's final report.

We have not needed to use the regression relationships derived by ACIL to determine the variable retail component, as our final decision applies the average fixed and variable allocation that corresponds to the average total retail cost based on ACIL's benchmarking analysis. These are the implied allocations that correspond to the average retail costs in Table 37.

Applying fixed and variable retail components to small customer retail tariffs

After deciding on the benchmark allocation of the total retail cost allowance to fixed and variable components, each component must be allocated to retail tariff components.

To allocate the fixed retail cost component, the total annual fixed benchmark retail cost (not including an allowance for regulatory fees) is divided by 365.25 days to derive a daily charge. This is expressed in cents per day and applied to the fixed component of retail tariffs.

To apply the variable retail cost components to each retail tariff, we have derived *variable retail cost allocators*, as set out in Table 37, column E below. These allocators represent the variable retail cost component (column B) as a percentage of total variable costs, excluding the variable retail cost component (column D). This approach generates percentage factors which allow us to apply the variable retail cost components evenly across tariff components, even when they are not expressed on a cent per kWh basis, such as demand charges. It also allows us to apply variable retail costs to time-of-use use tariff components, where the average cents per kWh estimate cannot be applied.

Using this approach means that the variable retail cost component changes in line with the underlying variable cost base. For example, if wholesale energy costs or network charges increased, the variable retail cost would also increase, as it is derived as a percentage of underlying variable costs. This is consistent with how the retail margin was applied in previous years. Conceptually, we consider it reasonable to assume that variable retail costs (including the required margin) would increase as underlying costs increase. This is because retailers face greater risk as underlying costs (and customer bills) increase—retailers should be compensated for this additional risk.

For the final decision we have updated our derivation of the variable cost allocator based on the total variable costs (less retail costs) included in 2015–16 notified prices, rather than 2016–17 variable costs. We consider this approach is more appropriate, as it produces variable retail cost allocators that better align with ACIL's retail cost observations (which are drawn from retail tariffs offered in 2015–16). This change has resulted in a slight increase in the variable retail cost allocators compared with the draft determination.

Table 37 Allocation of fixed and variable retail costs and variable cost allocators

Customer class	*A* *Benchmark fixed retail component ($/customer/yr)*	*B* *Benchmark variable retail component ($/customer/yr)*	*C* *Benchmark variable retail component (c/kWh)*	*D* *Benchmark total variable cost [a] ($/customer/yr)*	*E* *Variable retail costs allocator [b] (%)*
Residential	127.93	104.28	2.25	924.89	11.27%
Small business	181.56	422.23	2.58	3,298.72	12.80%

***a**. The total variable cost excludes the variable retail cost based on 2015–16 costs for an average tariff 11 customer consuming 4,640 kWh per year, and an average small business customer consuming 16,370 kWh per year, based on data from Energex.*

***b**. The variable retail cost allocator (column E) is derived by dividing column B by column D.*

To derive the variable retail cost component of each tariff, we multiply the underlying variable cost component of each tariff (net of variable retail costs) by the appropriate variable retail cost allocator (either residential or small business). The choice of allocator for each retail tariff is based on the category of customer accessing the tariff, as set out in Table 38.

Table 38 Allocation of total retail costs to fixed and variable components—small customer tariffs

Tariff	*Customer category for assigning retail cost allowance*	*Fixed retail component*	*Variable retail cost allocator*
Residential (T11, 12A & 14)	Residential	Yes	11.27%
Controlled loads (T31 & 33)	Residential	No	11.27%
Small business (T20, 22, 22A, 24 & 41)	Business—small	Yes	12.80%
Other unmetered loads—T91	Business—small	No	12.80%

Table 39 illustrates the application of the variable retail cost allocators using tariff 24 as an example, which features usage and demand components.

Table 39 Example application of variable retail cost allocators—tariff 24

Tariff 24	*Usage (c/kWh)*		*Demand ($/kW/month)*	
	Peak	**Off-peak/flat**	**Peak**	**Off-peak/flat**
A Base costs before variable retail costs [a]	–	13.768	71.601	11.765
B Apply variable retail cost allocator (%)	–	12.80	12.80	12.80
C Variable retail component (A x B)	–	1.762	9.165	1.506
D Variable charges including variable retail costs (A + C)[b]	–	15.530	80.766	13.271

a *Includes network and energy costs.*

b *Does not include five per cent adjustment to escalate to standing offer price levels or SRES pass-through amounts (see Chapter 6).*

Note: Totals may not add due to rounding.

Retail costs for large and very large business customer tariffs

As ACIL was not able to benchmark retail costs for large and very large business customer tariffs, we have decided to retain the 2015–16 large business customer retail operating cost allowances in real terms.

We have escalated the 2015–16 estimated retail operating costs (including margin allocated to the fixed component) to 2016–17 values using forecast change in the consumer price index (CPI) consistent with our approach in previous years. We have assumed an inflation rate of two per cent which is consistent with the mid-range of the Reserve Bank of Australia's inflation forecast of 1.5 to 2.5 per cent for the 12 months to June 2017.[92]

In previous determinations, we estimated and applied retail operating costs and the retail margin as discrete components. Retail operating costs were considered a fully fixed cost. The retail margin was estimated and applied as a percentage of total costs, recovered through both fixed and variable tariff components.

[92] Reserve Bank of Australia, *Statement on Monetary Policy*, May 2016, p. 61.

To apply a methodology consistent with that applied to small customer tariffs, the retail operating cost (ROC) allowance (including margin allocated to the fixed component) is taken as the fixed retail cost component and the variable component is equal to the margin of 5.7 per cent that we applied in 2015–16. To allocate the variable component across the total variable costs we have used a variable retail cost allocator of 6.0445 per cent of total variable costs, excluding variable retail costs. This allocator represents the percentage required to establish a variable retail cost component equal to 5.7 per cent of total variable costs, including the variable retail cost.

Fixed retail costs will be applied in the same way as in previous determinations, as set out in Table 40. All large and very large business tariffs will include both fixed and variable retail cost components, except tariff 71 (street lighting) which is considered a secondary tariff and attracts a variable retail cost only.

Table 40 Allocation of total retail costs to fixed and variable components—large business customer tariffs

Tariff	*Customer category for assigning retail cost allowance*	*Fixed retail component*	*Variable retail cost allocator*
Tariffs 44, 45, 46, 47 & 50	Business—large	Yes	6.0445%
Tariff 71	Business—large	No	6.0445%
Tariff 48	Business—very large	Yes	6.0445%

Adjusting the fixed retail cost allowance for regulatory fees

We have previously included an allowance for the regulatory fees that we charge retailers to recover the costs of performing our regulatory functions in the electricity industry. These fees are legitimate costs incurred by retailers in Queensland. Regulatory fees are charged to retailers on the basis of customer numbers and are therefore applied to the fixed component of retail tariffs only.

As not all jurisdictions have equivalent regulatory fees, ACIL has adjusted the observed benchmark retail allowances to exclude any regulatory fees applying in each jurisdiction. For this reason, it is appropriate to add the QCA's regulatory fees back into the benchmark retail estimates.

For 2016–17, we are estimating the costs of supply in south east Queensland for residential and small business customers, and the costs of supply in regional Queensland for large and very large business customers. Consistent with previous determinations, we have determined the 2016–17 allowances for regulatory fees as follows:

- for residential and small business customers, an allowance of $0.297 per customer, which was calculated by dividing the total fees estimated to be paid by retailers operating in south east Queensland by the total number of customers they supply[93]
- for large and very large business customers, an allowance of $2.071 per customer, which was calculated by dividing the fees estimated to be paid by Ergon Retail by the number of customers that Ergon Retail supplies.[94]

Table 41 sets out our final decision on the regulatory fee allowances for 2016–17 notified prices.

[93] The total fee estimate for south east Queensland retailers is $417,615 and the number of customers in south east Queensland is 1,407,927 (based on AER data as at 31 December 2015).

[94] The total fee estimate for Ergon Retail is $1,454,125 and the number of customers supplied by Ergon Retail is 701,977 (based on AER data as at 31 December 2015).

Table 41 Regulatory fees for 2016–17 retail cost allowances

Customer/tariff category	*Retail tariffs*	*Regulatory fees ($ per customer per year)*
Residential	11, 12A & 14	$0.297
Small business (< 100 MWh per year)	20, 22, 22A, 24 & 41	$0.297
Large business (100 MWh—4 GWh per year)	44, 45, 46, 47 & 50	$2.071
Very large business (> 4 GWh per year)	48	$2.071

Note: Regulatory fees are not applied to tariffs 31, 33, 71 and 91 for the reasons discussed in Chapter 5 and this appendix.

Other issues raised in submissions

Stakeholders raised a number of issues regarding retail costs in response to the QCA's draft determination, which are addressed below. Issues relating specifically to ACIL's methodology have been addressed by ACIL in its final report (May 2016), while the remaining issues have been addressed either below or in Chapter 5.

Table 42 Specific issues raised in submissions on the draft determination

Issue	*Stakeholder*	*QCA response*
The QCA's benchmark retail costs fail to recognise the costs of maintaining and supplying standard customers in Queensland. Adopting the QCA's draft approach could lead to an under-recovery of retail costs by a retailer which could have a negative impact on competition and the willingness of retailers to engage in the market.	Origin Energy	The QCA is required to set notified prices based on expected standing offer prices in SEQ. While retail costs have been derived from observed market offer prices, the QCA has applied a standing offer adjustment of five per cent to bring overall prices to an estimated standing offer price level.
Origin would expect retail operating costs (including customer acquisition and retention costs) and margin to be set separately to encourage new entrants, competition and business efficiencies in the Ergon network. Origin supports a retail margin based on a calculation of total costs as previously utilised by the QCA. It has been widely recognised that each of these elements need to be estimated to provide an efficient build-up of costs for an energy retailer.	Origin Energy	As the benchmark retail costs are based on competitive market offers, the allowances include some amount of CARC and margin. It is not clear why these allowances would need to be separately identified to facilitate competition and business efficiencies. Headroom is applied separately to notified prices for large customers to encourage competition in regional Queensland.
Origin does not agree with the proposed rebalancing of the fixed and variable components of the retail tariff. The rebalancing does not reflect a true allocation of costs to customers in Queensland and it may lead to the cross subsidisation between customer segments as retailers attempt to recover fixed costs.	Origin Energy	The allocation between fixed and variable costs is based on the average allocation observed in market prices across four competitive jurisdictions, including south east Queensland. The QCA has not received any further information from retailers detailing specifically how retail costs should be allocated between fixed and variable components. There is no one-size-fits-all approach. Ultimately, the QCA needs to estimate a value for these costs. Costs, and the allocation of those costs, differ markedly between retailers. Therefore, using the average allocation is a more reasonable approach than using the costs and

Issue	*Stakeholder*	*QCA response*
		allocations that align with any particular retailer.
The market offers selected by ACIL are the lowest in the market and thus there is a statistical bias. Costs to supply a standard customer in Ergon's region are likely to be higher.	Origin Energy	The QCA is required to set notified prices for small customers based on expected standing offer prices in south east Queensland. This means the QCA must consider costs of serving customers in south east Queensland, not regional Queensland.
ACIL has applied all conditional and unconditional discounts and product offers in the calculation of total electricity bills. These are likely to reflect the lowest cost to serve and are not reflective of the costs of supplying the market as a whole.	Origin Energy	While retail costs have been derived from observed market offer prices, the QCA has applied a standing offer adjustment of five per cent to bring overall prices to an estimated standing offer price level.
The accuracy of the benchmarking approach hinges on ACIL's ability to estimate the wholesale costs of an efficient retailer. Notwithstanding some directional offsetting of error between wholesale and retail cost estimates it seems like an unnecessary complication to base an estimate of efficient operating costs upon a consultant's modelled wholesale prices	Origin Energy	The QCA refers to ACIL's final report, May 2016.
Retail cost and margin allowances need to cover a retailer's risk-weighted investment in order to entice them to the market. The QCA's approach effectively limits future market entry to retailers able to compete at below the cost to serve and margin requirement inferred from the average of the lowest priced market offers.	Origin Energy	Notified prices for large and very large business customers include a headroom allowance as means of facilitating competition. Notified prices for small customers are not being set based on costs in regional Queensland. They are set in accordance with the UTP and are not intended to be set at a level that would directly encourage competition in the small customer market in regional Queensland at this time.
The QCA uses the allocation implied by the average fixed and variable retail cost allowances derived from ACIL's market offer observations. Origin does not support this approach and believes ACIL's analysis of the fixed and variable components of market offers is not representative of a retailer's true allocation of costs.	Origin Energy	The allocation is based on ACIL's observations of actual prices in competitive markets. No further evidence been provided to the QCA to support the assertion that the allocation is not representative. There is no one-size-fits-all approach. Ultimately, the QCA needs to estimate a value for these costs. Costs, and the allocation of those costs, differ markedly between retailers. Therefore, using the average allocation is a more appropriate approach than using the costs and allocations that align with any particular retailer.
The high degree of variability in the characteristics of retailers and their customers may not reflect the allocation of an efficient retailer supplying regional Queensland customers. EEQ requests the QCA review this allocation in future price determinations.	Ergon Retail	As above.
EEQ supports the QCA's position that it would not be beneficial to conduct a bottom-up review of retail costs on an annual basis and that annual cost increases should be calculated using a defined escalation method. EEQ also supports the QCA's	Ergon Retail	The QCA will consider the matter of escalating retail cost allowances in the course of determining 2017–18 notified prices, should it be delegated that role.

Issue	*Stakeholder*	*QCA response*
position that detailed reviews should be conducted where material changes in cost drivers emerge. To provide customers and other stakeholders with visibility, EEQ asks the QCA to share the detail of their approach to escalation and definition of material change in cost drivers.		
The QCA should ensure the methodology for estimating energy costs that is used and applied is exactly the same in the estimation of energy costs and the estimation of retail costs.	QCOSS	ACIL has applied the same methodology across all estimates of energy purchase costs.
In its retail costs report, ACIL undertook a full analysis of energy costs in every other jurisdiction. In future, additional data and accompanying spreadsheets should be provided for the other jurisdictions as for Queensland.	QCOSS	All energy cost estimates used in ACIL's retail cost modelling are set out in ACIL's final report (May 2016).
The QCA should weight the retail costs by customer numbers. This would give a more accurate reflection of costs across the sector. It would avoid the anomalies that a large number of small retailers could skew the overall results. Consideration should be given to using weighted rather than simple averages and the weightings should be based on retailers' market shares.	QCOSS Qld. Consumers Association	Addressed in section 5.4.2.
The current tariff 11 fixed charge (N+R) remains well below the Ergon Energy Distribution fixed rate. Therefore, the QCA's decision further increases the gap to cost reflective pricing. This reduces the possibility of moving towards the use of Ergon Energy Distribution's network tariff structures in the near future.	Ergon Distribution	The QCA considers the updated retail cost estimates are more cost-reflective than those previously used as they rely on real market data. The use of new retail cost estimates should in no way impede the use of cost reflective network charges in the future.
The QCA should set the 'R' component of the retail price using the R' related costs that apply in the Ergon retail market.	Canegrowers	The QCA sets notified prices for small customers based on estimated costs in south east Queensland, which is consistent with the UTP.
The market benchmark incorporates substantial competition related costs (previously referred to as customer acquisition and retention costs) that simply are not incurred in Ergon's retail markets where Ergon retail has an effective retail monopoly. Given the balance of evidence, there is no basis for the QCA to conclude that the market benchmarks it is using reflect efficient costs in Ergon retail markets.	Canegrowers	As above.
The proposed allowance for retailer costs in the draft determination is excessive. The available evidence indicates substantial reductions in retailer costs due to a combination of modern customer information and billing systems and economies of scope and scale. In other words, the QCA's current allowance for retailer costs already exceeds efficient costs.	Canegrowers	The market benchmarking exercise did not reveal such evidence, nor has any other evidence to support this been tendered to the QCA for consideration.
While CCIQ understands that there have been calls for the QCA to undertake a more comprehensive review of retail costs, this has resulted in detrimental impacts on pricing for small businesses. CCIQ believe that the QCA should reconsider continuing the	CCIQ	As noted in section 5.1, the QCA's previous estimates of retail costs are dated. We consider it appropriate to apply the latest updated cost estimates wherever possible.

Issue	*Stakeholder*	*QCA response*
previous approach of using the Queensland retail operating cost benchmark.		

APPENDIX K: COST PASS-THROUGH

This appendix provides further information about how the SRES pass-through amounts presented in section 6.2 were calculated.

First, we recalculated the actual cost of SRES compliance during 2015–16, in dollars per megawatt hour ($/MWh), based on the binding STP for the 2016 calendar year, using the same approach as ACIL. We then subtracted the SRES allowance included in 2015–16 notified prices from the actual 2015–16 SRES cost. This revealed an SRES over-recovery of $0.06 per MWh (0.006 c/kWh), as shown in Table 43.

Table 43 2015–16 SRES over-recovery for all settlement classes

	Period	*STP (%)[a]*		*Clearing House Price[a] ($/MWh)*	*SRES cost ($/MWh)*	*2015–16 average SRES cost ($/MWh)*
		Binding	*Non-binding*			
2015–16 Final determination allowance	1 Jul–31 Dec 2015	11.71%		$40.00	$4.684	$4.34
	1 Jan–30 Jun 2016		9.98%	$40.00	$3.992	
2015–16 Actual cost	1 Jul– 31 Dec 2015	11.71%		$40.00	$4.684	$4.28
	1 Jan–30 Jun 2016	9.68%		$40.00	$3.872	
Over-recovery in 2015–16 (before losses, margin and headroom)						**$0.06**

a *Published by the Clean Energy Regulator.*

Next, we made an adjustment to the over-recovery to account for network losses to determine the SRES liabilities based on energy acquired. In the 2015–16 determination, we applied a loss factor to energy purchase costs for each settlement class to reflect transmission and distribution losses for each settlement class. We applied the same network loss factors to the over-recovered SRES amounts calculated above, consistent with the 2015–16 determination.

To restore the real values of the over-recovered amounts, we made an adjustment to reflect the time-value of money for retailers over that 12-month period, proxied by a nominal weighted-average cost of capital of 8.47 per cent.[95] Finally, we applied the retail margin of six per cent[96] and a headroom allowance of five per cent (which reflect the allowances applying in the year the over-recovery was incurred) to arrive at the final SRES pass-through amounts. The result is three discrete pass-through amounts, which are applied at the final stage of the build-up of 2016–17 notified prices, according to the relevant underlying network tariff class.

The calculations and pass-through amounts to apply to each settlement class are set out in Table 44.

[95] Estimated in accordance with the QCA's weighted average cost of capital methodology.

[96] A retail margin of 6.0445 per cent of total costs (excluding the margin) is equivalent to the 2015–16 retail margin of 5.7 per cent of total costs (including the margin).

Table 44 SRES pass-through amounts for 2016–17 by settlement class

Energex NSLP—Residential, small business, unmetered supply and controlled load 9000 and 9100	
Base SRES over-recovery in 2015–16 (c/kWh)	0.0060
+ Energy losses (total loss factor)	1.0650
+ Time value of money (%)	8.47%
Total over-recovery before application of retail margin and headroom ($2016–17 c/kWh)	0.0069
+ 2015–16 Retail margin (%)	6.0445%
+ Headroom allowance (%)	5%
SRES pass-through 2016–17 (c/kWh)	**–0.0077**
Ergon Energy NSLP - Small, medium and large SAC demand and street lighting	
Base SRES over-recovery in 2015–16 (c/kWh)	0.0060
+ Energy losses (total loss factor)	1.1230
+ Time value of money (%)	8.47%
Total over-recovery before application of retail margin and headroom ($2016–17 c/kWh)	0.0073
+ 2015–16 Retail margin (%)	6.0445%
+ Headroom allowance (%)	5%
SRES pass-through 2016–17 (c/kWh)	**–0.0081**
Ergon Energy NSLP—High-voltage demand and customers over 4 GWh (SAC HV, CAC and ICC)	
Base SRES over-recovery in 2015–16 (c/kWh)	0.0060
+ Energy losses (total loss factor)	1.0660
+ Time value of money (%)	8.47%
Total over-recovery before application of retail margin and headroom ($2016–17 c/kWh)	0.0069
+ 2015–16 Retail margin (%)	6.0445%
+ Headroom allowance (%)	5%
SRES pass-through 2016–17 (c/kWh)	**–0.0077**