

Queensland Competition Authority

Final determination

Regulated retail electricity prices for 2017–18

June 2017

We wish to acknowledge the contribution of the following staff to this report:

Sarah Duval, Adam Liddy, Jennie Cooper, Wei Fang Lim, Zach Zhang and Thomas Gardiner

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EXECUTIVE SUMMARY

The Queensland Competition Authority (QCA) has made its final determination on the regulated retail electricity prices (notified prices) to apply from 1 July 2017 to 30 June 2018. In general, notified prices are paid by customers who have not entered into a negotiated or market contract with their retailer. The QCA has been delegated the role of setting notified prices by the Minister for Energy, Biofuels and Water Supply and is required to set prices in accordance with the Minister's delegations dated 10 November 2016 and 31 May 2017, and the *Electricity Act 1994* (the Electricity Act). In accordance with the delegation dated 31 May 2017, this final determination incorporates into the final determination issued on 31 May 2017, revised network tariffs that have been reduced following the Minister's direction to Energy Queensland to remove charges for the Solar Bonus Scheme.

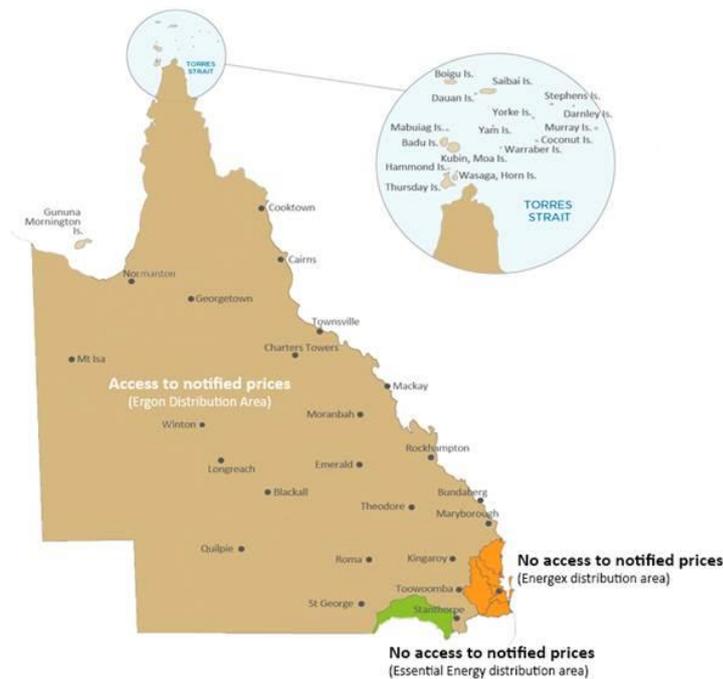
The QCA appreciates the valuable contributions that stakeholders make to our price determination processes, especially those who participate in our workshops and webinars, or made submissions. While we have not conducted consultation under this delegation, we consider all issues raised by stakeholders under the previous 2017–18 regulated retail electricity price setting process to be relevant to this determination and have carefully considered the issues raised in these submissions.

Who can access notified prices?

Notified prices are only available to residential, small business and non-market¹ large business customers in the Ergon Energy Corporation Limited (Ergon Distribution) distribution area. Notified prices are not available to regional customers located outside of this distribution area.²

¹ Large business customers supplied by Ergon Retail are classified as 'non-market' customers. Large business customers supplied by other retailers in regional Queensland are classified as 'market' customers.

² Customers in Essential Energy's distribution area in southern Queensland do not have access to notified prices, but Origin Energy receives a subsidy from the Queensland Government to ensure that non-market customers in that distribution area pay no more than similar customers that have access to notified prices. Retail price regulation in the Energex distribution area was removed on 1 July 2016.

Figure 1 Access to notified prices

What is the QCA's approach to setting notified prices?

The QCA's approach to setting notified prices for 2017–18 is largely consistent with the approach we took in the 2016–17 price determination.

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 (i.e. the Energex distribution area). We have also continued to base notified prices for large business customers on the lowest costs of supply in regional Queensland (i.e. Ergon Distribution's east pricing zone, transmission region 1).

The application of the UTP means that notified prices for residential and small business customers in regional Queensland broadly reflect the expected prices for similar customers on standing offers in south east Queensland. It also means that notified prices for large business customers in regional Queensland are based on the lowest costs of supply in regional Queensland³, rather than the actual costs of supply.

As the actual costs of supplying residential, small business and some large business customers are generally higher⁴ than notified prices, the application of the UTP benefits customers in regional Queensland. To cover the difference between notified prices and the costs that Ergon Energy Queensland Limited (Ergon Retail) actually incurs, the Queensland Government pays Ergon Retail a subsidy. This subsidy is significant, with the Queensland Government expecting to pay \$561.2 million⁵ to subsidise regional electricity customers in 2016–17.⁶

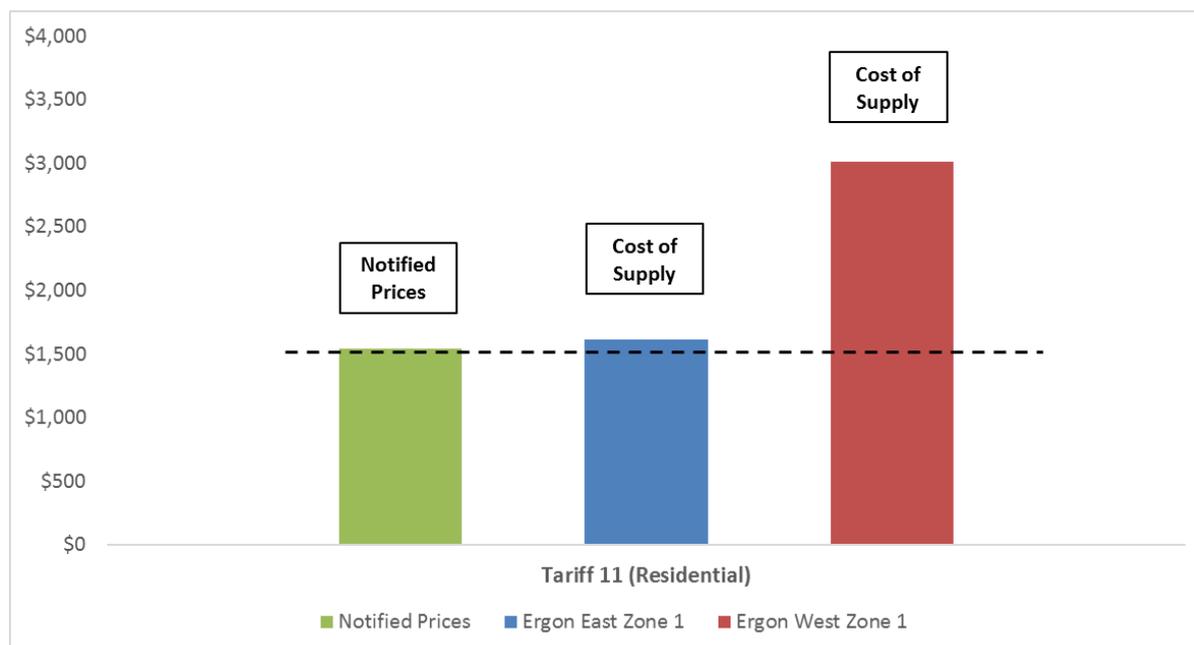
³ Ergon Distribution's east zone, transmission region one.

⁴ The difference in the costs of supply is largely due to the higher network costs associated with supplying electricity over long distances to a low-density customer base.

⁵ \$2.8 million dollars of this subsidy is paid to Origin Energy for customers in the Essential Energy distribution area.

⁶ Queensland Government, State Budget 2016–17—Budget Strategy and Outlook, Appendix A, June 2016, p. 215.

Figure 2 Notified prices for typical residential compared to actual costs of supply in regional Queensland (incl. GST)



Note: The cost of supply excludes standing offer adjustment. Ergon East Zone 1 refers to Ergon Distribution’s east pricing zone, transmission region 1. Ergon West Zone 1 refers to Ergon Distribution’s west pricing zone, transmission region 1.

We have again used the network (N) plus retail (R) cost build-up approach to calculate notified prices for 2017–18. Under this approach, we base the N costs on the relevant network tariffs submitted to the Australian Energy Regulator (AER) by Energex or Ergon Distribution. This means the N costs are generally treated as a pass-through. We determine the R costs (energy and retail costs) using the latest information, including observations from competitive retail and wholesale electricity markets in Australia.

In broad terms, the N plus R methodology produces estimates of efficient south east Queensland price levels for residential and small business customers. However, to be consistent with the Queensland Government’s UTP, the price levels for these customers need to reflect the expected standing offer prices in south east Queensland. Consequently, to maintain consistency with the UTP, it is necessary to add an amount to the N plus R estimates, which reasonably represents the expected differential between our estimates of efficient price levels and expected standing offer price levels (the standing offer differential).

Consistent with our approach in previous price determinations, we have included an allowance for headroom in notified prices for large business customers only. The use of a headroom allowance is a generally accepted approach aimed at stimulating competition and customer engagement in emerging competitive markets. Given that competition in the large business customer segment in regional Queensland has the potential to develop further, particularly in areas where notified prices more closely reflect the actual costs of supply, we consider that the inclusion of an allowance for headroom will support competition, by encouraging customers to engage in the market and seek out better offers.

Why will notified prices change between 2016–17 and 2017–18?

Notified prices will change between 2016–17 and 2017–18 due largely to movements in energy costs and network costs.

Energy costs will increase for all customers in 2017–18, primarily driven by substantial increases in wholesale energy costs. The changes in estimated wholesale energy costs are substantial and reflect the projected tightening of demand–supply conditions in the NEM (National Electricity Market) in 2017–18. The QCA’s consultant, ACIL Allen, has advised that the tightening is due to several factors, including the

increase in demand from in-field gas compression associated with the LNG export facilities, little additional renewable capacity in Queensland⁷, and changes in the expected demand–supply balance in Victoria (the closure of Hazelwood power station and continued operation of the Portland smelter)^{8,9}.

In contrast, network costs have decreased for many customers. These decreases are a result of the AER's final decisions on Energex's and Ergon Energy's 2015–20 distribution determinations, and the removal of Solar Bonus Scheme costs from network prices. However, these decreases have not been sufficient to completely offset the substantial increase in energy costs.

How will the QCA's price determination impact on customer bills?

To illustrate the impacts of the final determination on customer bills, we have provided comparisons of the annual amount typical customers¹⁰ would have paid under 2016–17 notified prices and the annual amount that they will pay under the 2017–18 notified prices. It is important to note that this information is only intended to show the impact of the annual change in notified prices on a typical customer's bill. It is not intended to demonstrate the annual change in the total amount a customer will pay their electricity retailer in a given year.

Many customers will incur additional charges that are not set by the QCA and cannot legally be included in notified prices. For example, most customers will also pay metering charges. These charges are set by the AER and will vary from customer to customer depending on a range of factors, including (but not limited to) the type of meter installed, the number of tariffs a customer uses and whether a customer has a solar power system. As these charges do not form part of notified prices or the QCA's price determination, they have not been included in the customer impact analysis for notified prices.

Residential customers

The main retail tariff for residential customers is tariff 11. Many customers on tariff 11 are also on one of the controlled load tariffs (tariffs 31 and 33).¹¹

The annual notified price bill for a typical customer on tariff 11 will increase by 3.3 per cent from \$1,490 (GST inclusive) to \$1,539 (GST inclusive) as a result of the change in notified prices between 2016–17 and 2017–18. For a typical customer on a combination of tariffs 11 and 31 or tariffs 11 and 33, the increase will be 4.3 per cent and 3.1 per cent respectively. However, the impact on individual customers will vary depending on their consumption. Customers with lower consumption than the typical customer will face smaller increases while higher-consumption customers face larger increases.

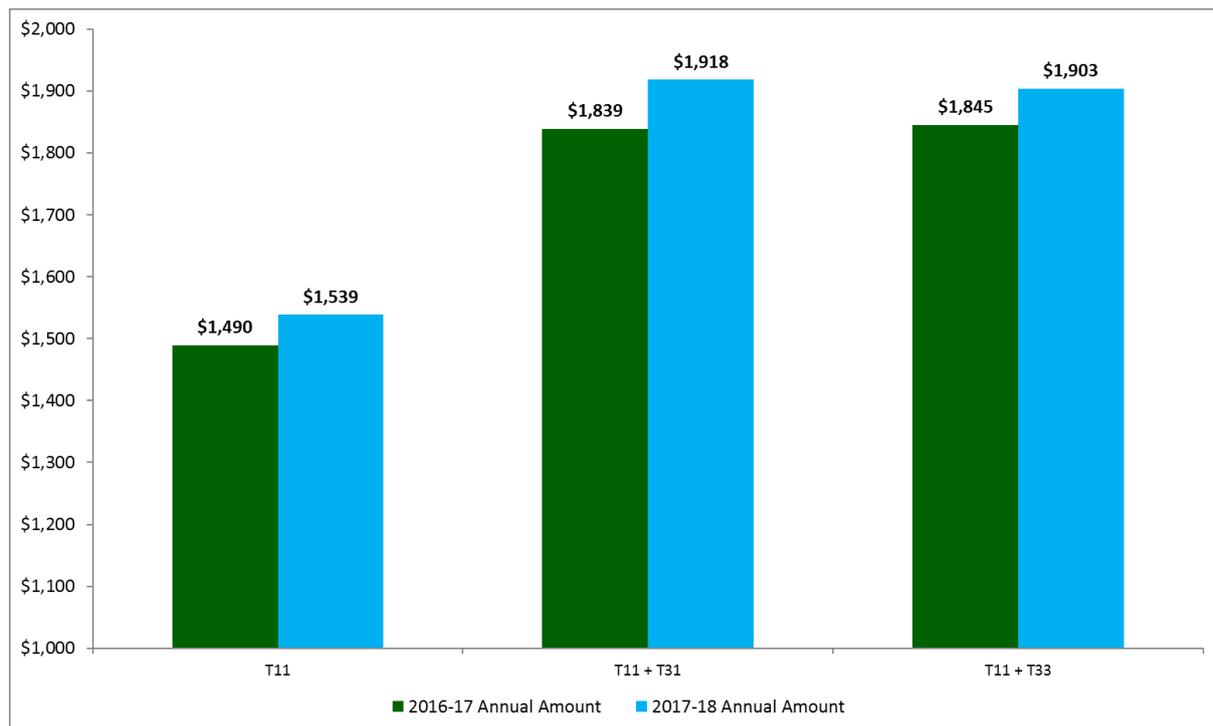
⁷ While a number of new renewable energy projects are planned, only a limited amount of new renewable generation will be fully operational in 2017–18, with a number of renewable energy projects likely to commence operation towards the end of, or after, the 2017–18 financial year in mid-2018.

⁸ Wholesale electricity is sold through the NEM, which allows trade in electricity across five interconnected regions (Queensland, New South Wales, Victoria, South Australia and Tasmania). The interconnected nature of the market means changes in the demand/supply balance in one region will impact on other regions of the NEM.

⁹ ACIL Allen, *Estimated Energy Costs–2017–18 Retail Tariffs*, 9 May 2017, p. 25.

¹⁰ The typical customer for a given retail tariff is the median or middle customer in terms of consumption out of all customers on that tariff in regional Queensland. The typical customer consumption data is provided by Ergon Retail and more information is provided at Appendix H.

¹¹ Controlled load tariffs may be used for appliances such as water heaters and pool pumps. These tariffs are cheaper than tariff 11 as customers are only guaranteed supply for a set number of hours (tariff 31 guarantees supply for 8 hours per day and tariff 33 guarantees supply for 18 hours per day).

Figure 3 Impact of the change in notified prices on typical residential customers (incl. GST), 2017–18

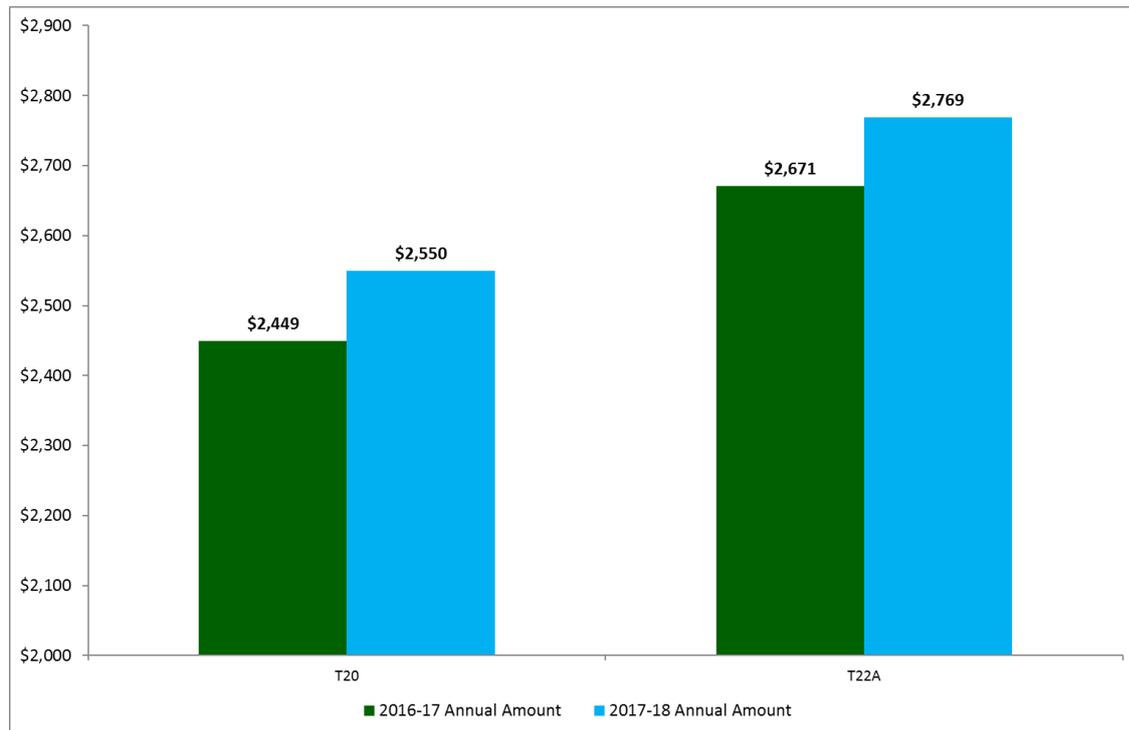
Note: The annual amounts have been rounded to the closest dollar.

Small business customers

The annual notified price bill for a typical customer on the main small business tariff (tariff 20) will increase by \$101 or 4.1 per cent as a result of the change in notified prices between 2016–17 and 2017–18. For a typical customer on the seasonal time-of-use tariff (tariff 22A), the expected increase will be slightly lower, at 3.6 per cent.

However, it is important to note that bill impacts for individual customers will vary depending on their level of consumption and, if the customer is on tariff 22A, the pattern of their consumption.

Figure 4 Impact of the change in notified prices on typical small business customers (incl. GST), 2017–18

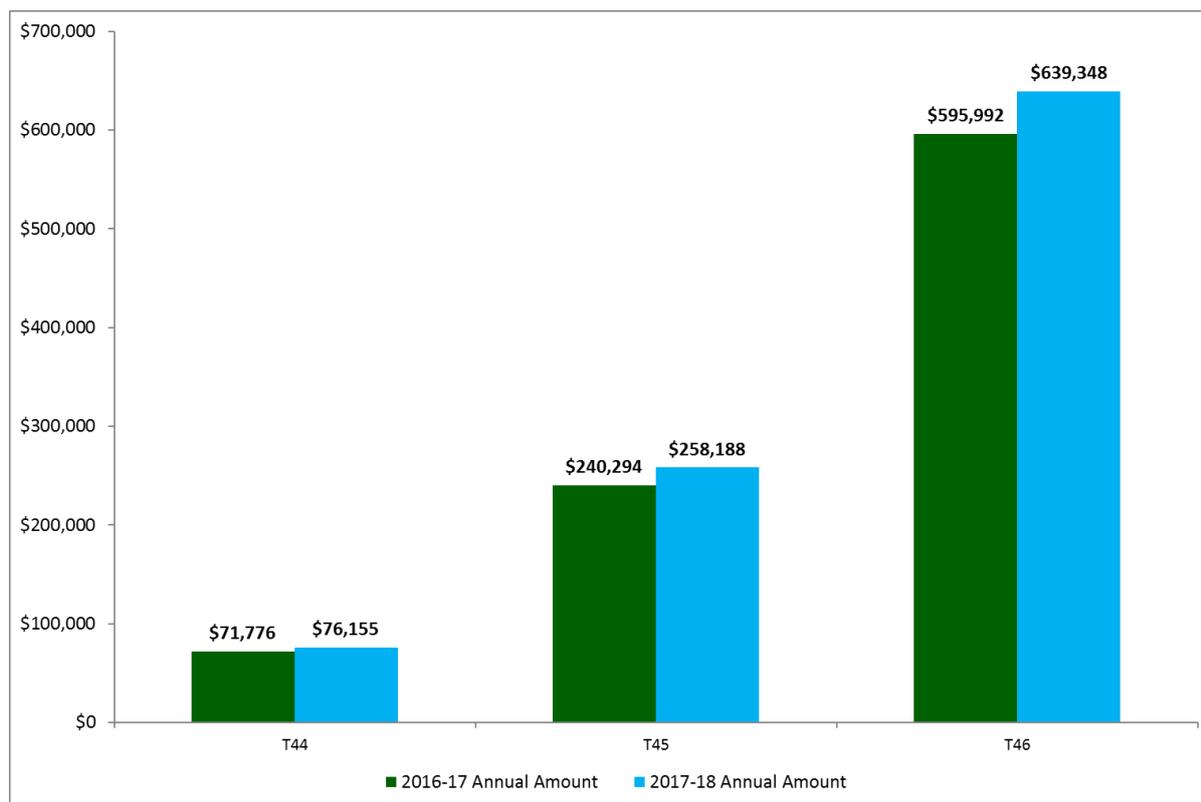


Note: The annual amounts have been rounded to the closest dollar.

Large business customers

Typical large business customers will see increases in their annual notified price bills of between 6.1 per cent and 7.4 per cent as a result of the change in notified prices between 2016–17 and 2017–18. However, it is important to note that bill impacts for individual customers will vary depending on their level and pattern of consumption.

Figure 5 Impact of the change in notified prices on typical large business customers (incl. GST), 2017–18



Note: The annual amounts have been rounded to the closest dollar.

What is the QCA's approach to transitional and obsolete tariffs?

Some business customers, including farmers and irrigators, are supplied under transitional or obsolete tariffs. These retail tariffs are legacy retail tariffs for which there is no corresponding network tariff. As a result, the prices of these tariffs cannot be determined under the N+R cost build-up methodology.

Transitional and obsolete 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 incur lower electricity bills if they moved immediately to a standard business tariff, but some customers would face much higher bills.

The QCA has maintained transitional arrangements for 2017–18 and adjusted the charges in each transitional and obsolete tariff in line with the percentage increases in the standard business tariffs customers would otherwise pay. The QCA has also applied an additional escalation factor to limit charges for transitional and obsolete tariffs falling further below cost, in dollar terms. This approach is consistent with the QCA's general approach in previous price determinations.

The QCA has also introduced transitional arrangements for customers on existing high voltage retail tariffs, as Ergon Distribution intends to phase out the network tariff underlying these tariffs in 2017–18. Under the transitional arrangements, the two high voltage retail tariffs (tariffs 47 and 48) have been classed as obsolete and therefore will only be available to existing customers for a transitional period of five years. Consistent with our approach to other transitional and obsolete tariffs, we have adjusted these tariffs in line with changes in the relevant standard business tariffs, and applied escalation factors to limit charges falling further below cost, in dollar terms.

We consider that this approach strikes the right balance, as it will allow existing customers on the two high voltage retail tariffs time to adjust their operations before moving to alternative retail tariffs. It also ensures that new customers do not make long-term investment and business decisions based on legacy high voltage tariffs that will only be available for five years. Given that many of these customers are likely to be using very large amounts of energy (tariff 48 customers are some of the largest energy users in Queensland) and making significant capital investments, we consider it is important that they make those decisions based on the correct pricing signals.

THE ROLE OF THE QCA – TASK AND CONTACTS

The QCA is an independent statutory authority which promotes 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, Biofuels and Water Supply (Appendix A) and the Electricity Act.

Contacts

Enquiries regarding this project should be directed to:

Tel (07) 3222 0555

www.qca.org.au/Contact-us

1 INTRODUCTION

The QCA received a delegation in November 2016 from the Minister for Energy, Biofuels and Water Supply (the Minister) to determine regulated retail electricity prices (notified prices) to apply from 1 July 2017 to 30 June 2018 (the November 2016 delegation). Consistent with the November 2016 delegation, we:

- *released an interim consultation paper on 16 November 2016 advising interested parties of the commencement of our review;*
- *released a draft determination on 24 February 2017, along with ACIL Allen’s draft report on estimated energy costs;*
- *held a webinar (hosted by the Chamber of Commerce and Industry Queensland) and five workshops (in Brisbane, Bundaberg, Cairns, Toowoomba and Townsville) in March 2017;*
- *released a final determination and gazetted notified prices for 2017–18 on 31 May 2017 (the Final Determination).*

Following the release of the Final Determination, the Minister advised the QCA that he had directed Energy Queensland to remove charges for the Solar Bonus Scheme from network prices, over the three years through to 2019-20. Accordingly, the Minister issued the QCA with a new delegation to determine notified prices for 2017–18 (the May 2017 delegation), so that the QCA could incorporate the revised network tariffs into the Final Determination. The notified prices that the QCA determines under the May 2017 delegation will replace those it gazetted on 31 May 2017. The QCA is required to publish the final price determination no later than 16 June 2017.

The matters we are required by the May 2017 delegation to consider when determining notified prices for 2017–18 are outlined in section 1.3 below. These are the same matters we were required to consider by the November 2016 delegation in making the May final determination on 31 May 2017. The May 2017 delegation also states that the consultations and resulting considerations conducted under the November 2016 delegation, and the draft determination published under that earlier delegation, remain relevant for the new price determination process. Consequently, the May 2017 delegation does not require the QCA to (i) publish a new interim consultation paper, (ii) conduct a new round of workshops and additional consultation, or (iii) publish a draft determination.

Given the above (particularly the need to determine notified prices by 16 June 2017), and consistent with the May 2017 delegation and section 90(5)(b) of the Electricity Act, the QCA considers that it is neither necessary nor practicable to (i) further consult on the methodology it will use to determine the 2017–18 notified prices or (ii) publish a draft determination based on the new delegation (as the draft determination released under the November 2016 delegation remains relevant to the new price determination process).

This final determination publishes the regulated retail tariffs and prices for 2017–18. In making this final determination we have taken into account:

- *the requirements of the Electricity Act and the May 2017 delegation*
- *the consultations and resulting considerations conducted under the November 2016 delegation*

- *the draft determination published under the November 2016 delegation*
- *ACIL Allen's final report on estimated energy costs which was prepared under the November 2016 delegation*
- *our own analysis.*

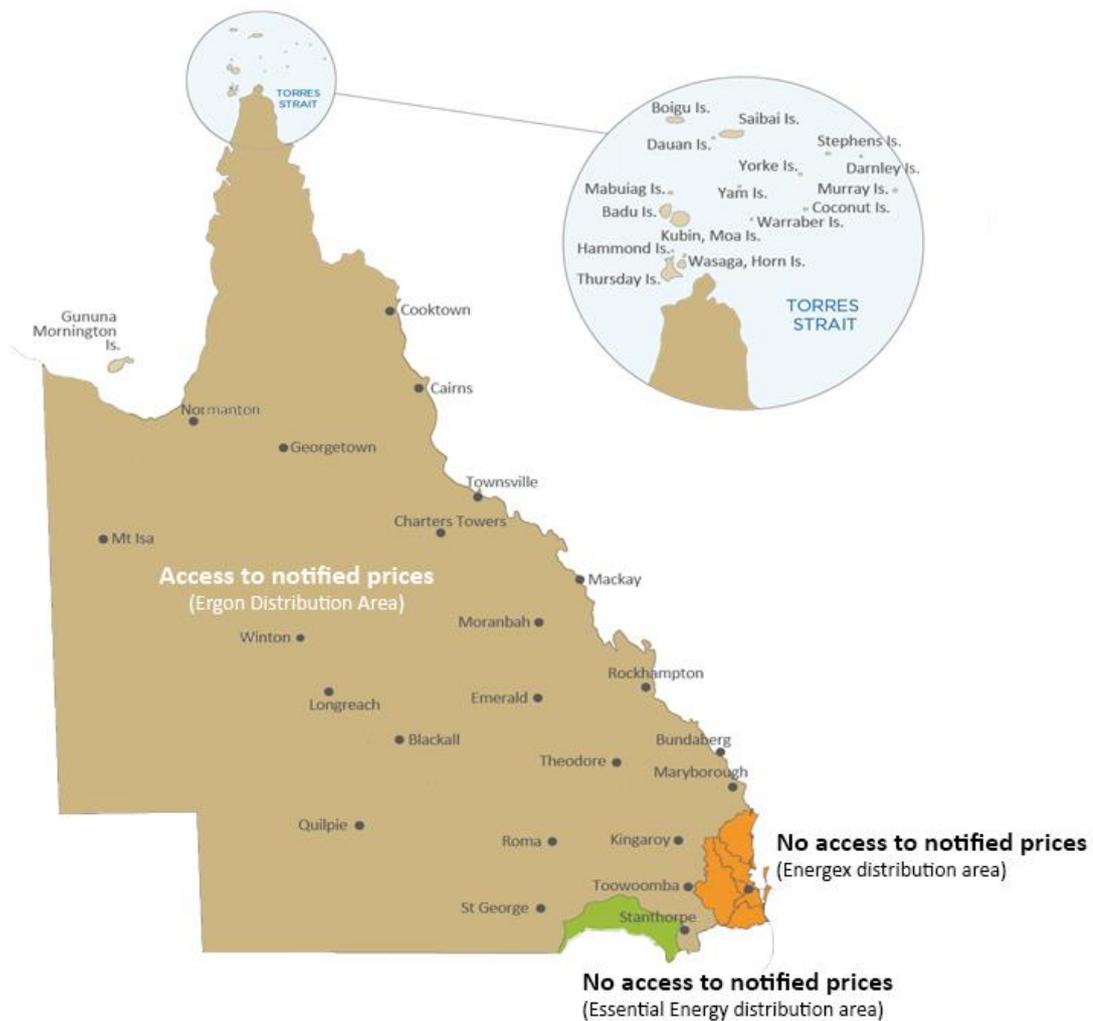
All non-confidential documents relating to 2017–18 notified prices are available on our [website](#).¹²

1.1 Access to notified prices

Notified prices are only available to residential, small business and non-market large business customers in the Ergon Energy Corporation Limited (Ergon Distribution) distribution area. Notified prices are not available to regional customers located outside of this distribution area.¹³

¹² <http://www.qca.org.au/Electricity/Regional-consumers/Reg-Electricity-Prices>.

¹³ Customers in Essential Energy's distribution area in southern Queensland do not have access to notified prices, but Origin Energy receives a subsidy to ensure that non-market customers in that distribution area pay no more than similar customers that have access to notified prices. Notified prices no longer apply to customers in south east Queensland, where retail price regulation was removed on 1 July 2016.

Figure 6 Access to notified prices

1.2 Legislative framework—the Electricity Act

We must determine notified prices in accordance with the Electricity Act. While that Act does not specify criteria or principles to be applied in making a price determination, it directs us to have regard to the following matters:

- (a) the actual costs of making, producing or supplying the goods or services
- (b) the effect of the price determination on competition in the Queensland retail electricity market
- (c) any matter we are required by delegation to consider
- (d) any other matter we consider relevant.¹⁴

We must also have regard to the objects of the Electricity Act, which are to:

- (a) set a framework for all electricity industry participants that promotes efficient, economical and environmentally sound supply and use

¹⁴ Section 90(5) of the Electricity Act.

- (b) regulate the electricity industry and electricity use
- (c) establish a competitive electricity market in line with the national electricity industry reform process
- (d) ensure that the interests of customers are protected
- (e) take into account national competition policy requirements.¹⁵

1.3 Matters we are required to consider by the Minister's delegation

The matters we are required by the May 2017 delegation to consider when determining notified prices for 2017–18 are outlined below.

The Uniform Tariff Policy

Consistent with previous price determinations, we are required to consider the Queensland Government's Uniform Tariff Policy (UTP). The UTP provides that 'wherever possible, small standard retail contract customers and large non-market customers of the same class should pay no more for their electricity, regardless of their geographic location'.¹⁶ The covering letter to the delegation further specifies that, for the purposes of the delegation, 'regulated prices for small customers in regional Queensland should continue to broadly reflect the expected prices for small customers on standing offers in south east Queensland'.¹⁷

Applying the UTP means that notified prices for residential and small business customers in regional Queensland broadly reflect the expected prices for similar customers on standing offers in south east Queensland. It also means that notified prices for large business customers in regional Queensland are based on the lowest costs of supply in regional Queensland, rather than the actual costs of supply. As the actual costs of supplying residential, small business and some large business customers are generally higher than notified prices¹⁸, the application of the UTP benefits customers in regional Queensland.

To cover the difference between notified prices and the costs that Ergon Energy Queensland Limited (Ergon Retail) actually incurs to supply regional customers, the Queensland Government pays Ergon Retail a subsidy. This subsidy is significant, with the Queensland Government expecting to pay \$561.2 million¹⁹ to subsidise regional electricity customers in 2016–17.²⁰

'N+R' cost build-up methodology

Consistent with the approach in previous price determinations, we must consider using the Network (N) plus Retail (R) cost build-up methodology when determining notified prices for 2017–18. Under this methodology, the N costs (network costs) are generally treated as a pass-through and the R costs (energy and retail costs) are determined by the QCA.

¹⁵ Section 3 of the Electricity Act.

¹⁶ Clause 5(b) of the delegation (Appendix A).

¹⁷ A copy of the Minister's covering letter is provided in Appendix A.

¹⁸ The differences in the costs of supply are largely due to the higher network costs associated with supplying electricity over long distances to a low-density customer base.

¹⁹ \$2.8 million dollars of this subsidy is paid to Origin Energy for its customers in the Essential Energy distribution area.

²⁰ Queensland Government, *State Budget 2016–17—Budget Strategy and Outlook*, Appendix A, June 2016, p. 215.

The network cost (N) component

When calculating the N component for each regulated retail tariff, the delegation requires that the QCA consider continuing with the general approach that it has applied in previous price determinations. This means using the Energex network charges and tariff structures when we determine non time-of-use retail tariffs²¹ for residential and small business customers (tariffs 11, 20, 31, 33, 41 and 91²²).

When we determine time-of-use²³ and time-of-use demand retail tariffs²⁴ for residential and small business customers (tariffs 12A, 14, 22A and 24), we must consider basing the N component on the price level of network charges to be levied by Energex and the network tariff structures of Ergon Distribution.

For large business customers, we must consider basing the N component on the Ergon Distribution network charges and tariff structures. We adopted this approach in previous price determinations.

Transitional arrangements

We are required to consider maintaining the transitional arrangements for tariffs classed as transitional or obsolete (for example, farming and irrigation tariffs). We are also required to consider allowing all customers in Ergon Distribution's distribution area to access tariffs designated as transitional in 2013–14.

²¹ Non time-of-use tariffs are retail tariffs with usage charge rates that do not vary with the time and/or level of consumption.

²² Tariff 91 applies to unmetered supplies (except street lighting).

²³ Time-of-use tariffs are retail tariffs with usage charge rates that vary with the time of consumption.

²⁴ Time-of-use demand tariffs are retail tariffs with usage and demand charge rates that vary with the time of consumption and/or demand.

2 PRICING FRAMEWORK

The objects of the Electricity Act and the matters we are required to consider under the Electricity Act indicate that cost-reflective prices and the promotion of retail competition are important guiding principles in making a price determination. Cost-reflectivity is important for efficiency and equity reasons. The 2016–17 price determination was also designed to support retail competition in the large business customer segment in regional Queensland.

Under the Minister's May 2017 delegation, we are also required to consider the UTP. The application of the UTP in previous price determinations has resulted in most notified prices being based on costs of supply, which are below the actual costs of supply (see section 1.4).

Given that there is a degree of conflict between the matters we are required to consider under the Electricity Act and those we are required to consider under the Minister's delegation, we have considered a broad range of possible pricing approaches for 2017–18, particularly for the residential and small business customers (small customers) in Ergon Distribution's distribution area.

Our final decision is to continue basing notified prices for residential and small business customers in regional Queensland on the expected standing offer prices in south east Queensland, and to base notified prices for large business customers in regional Queensland on the lowest costs of supply in regional Queensland, which is Ergon Distribution's east pricing zone, transmission region one.

2.1 Residential and small business customers

In order to take into account the requirements of the Electricity Act and the UTP, we have considered a range of possible pricing approaches to setting the pricing framework for determining notified prices for small customers.

Cost build-up approach

The Minister's May 2017 delegation requires us to consider an N+R cost build-up methodology when determining notified prices for 2017–18. Under this methodology, the N costs (network costs) are generally treated as a pass-through and the R costs (energy and retail costs) are determined by the QCA.

QCA position

Our final decision is to continue estimating 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. This is consistent with the Minister's delegation and previous determinations.

Cost base

We also need to consider the appropriate costs of supply on which to base the notified prices for small customers.

We could maintain the approach we took in the 2016–17 price determination and base the notified prices on the costs of supply in south east Queensland (that is, costs in Energex's distribution area). As the costs of supply in south east Queensland are generally lower than those in regional Queensland, adopting this approach would result in customers continuing to

pay prices which do not reflect the actual costs of supply. This would potentially encourage inefficient investment and consumption, and require the ongoing subsidisation of electricity prices by taxpayers.²⁵ However, this approach may be considered reasonable, as it would be consistent with the Queensland Government's definition of the UTP for 2017–18.

Another possible approach would be to base the notified prices for small customers on the lowest costs of supply in regional Queensland (that is, the costs in Ergon Distribution's east pricing zone, transmission region one). We have used this approach in setting notified prices for large business customers in regional Queensland since 2012.²⁶ Adopting this approach for small customers would improve the cost-reflectivity of the notified prices relative to setting prices based on the costs of supply in south east Queensland. It would also reduce the amount that taxpayers would pay to subsidise electricity prices in regional Queensland. However, it would be inconsistent with the Queensland Government's definition of the UTP for 2017–18, and may result in substantial price increases for customers. For example, based on estimates for 2016–17, the costs of supplying residential customers in Ergon Distribution's east pricing zone, transmission region one are 21 per cent higher than the costs of supplying the customers of the same class in south east Queensland.²⁷

A third approach would be to set the notified prices in each of the pricing regions in Ergon Distribution's distribution area at cost-reflective levels. This approach would promote retail competition and remove the need to subsidise regional electricity prices. However, it would be inconsistent with the UTP, as some small standard retail contract customers would, based on their geographic location, pay more for their electricity than small standard retail contract customers of the same class in other areas of Queensland. Cost-reflective prices would also result in substantial price increases, particularly for customers in western Queensland and those supplied by isolated systems. For example, based on estimates for 2016–17, the costs of supplying residential customers in Ergon Distribution's west pricing zone, transmission region one are 118 per cent higher than the costs of supplying the customers of the same class in south east Queensland.²⁸

Submissions received under the November 2016 delegation

Canegrowers Isis, the Queensland Council of Social Service (QCOSS) and the Queensland Consumers Association supported the approach of basing the notified prices on the costs of supply in south east Queensland. The QCOSS said this would be the only approach that would meet the purpose of regulation of retail electricity prices.²⁹ The Chamber of Commerce and Industry Queensland (CCIQ) considered that basing the notified prices on the costs of supply in regional Queensland 'would be prohibitively expensive for small business customers'.³⁰

QCA position

Our final decision is to continue basing notified prices for residential and small business customers on the costs of supply in south east Queensland. We consider this reasonable

²⁵ As discussed in Section 1.4, the cost of this subsidy was expected to be \$561.2 million in 2016–17.

²⁶ We started using this approach for large business customers in regional Queensland when retail price regulation for large business customers in south east Queensland was discontinued.

²⁷ The cost estimates are based on a typical tariff 11 customer.

²⁸ The cost estimates are based on a typical tariff 11 customer.

²⁹ QCOSS, Submission on the QCA interim consultation paper, *Regulated retail electricity prices 2017–18*, 7 December 2016, p. 5.

³⁰ CCIQ, Submission to the QCA draft determination, *Regulated Retail Electricity Prices for 2017–18*, 3 April 2017, p. 2.

because it is consistent with the Queensland Government's UTP and it avoids the potentially large price increases associated with the other approaches.

Benchmark price level

To establish an appropriate benchmark price level for setting notified prices based on the costs of supply in south east Queensland, we have considered the Queensland Government's definition of the UTP that notified prices for small customers in regional Queensland should broadly reflect the expected prices for small customers on standing offers in south east Queensland.³¹

Customers on standing offers are supplied on the standard retail contract under the National Energy Customer Framework (NECF).³² This contract contains standard terms and conditions. Customers who do not, or cannot, opt for a market contract are supplied by a standing offer by default.

A retailer can also offer market contracts that have different terms and conditions to standard retail contracts (for example, discounts on the bill if the customer pays early or pays by direct debit). Prices under market contracts are generally lower than standing offer prices.

Submissions received under the November 2016 delegation

Canegrowers argued for basing notified prices in regional Queensland on the most competitive market offer prices in south east Queensland. CCIQ argued for a price level between the competitive market offer prices and the standing offer prices in south east Queensland.³³

QCOS considered that it would not be appropriate in future price determinations for notified prices for small customers in regional Queensland to 'reflect the expected prices for small customers on standing offers in SEQ'. It also noted that 'this is an issue for the Minister to note in drafting the delegation for 2018–19'.³⁴

QCA position

Our final decision is to determine notified prices for small customers in regional Queensland based on expected standing offer prices in south east Queensland. The May 2017 delegation's covering letter makes it clear that setting prices below expected standing offer prices in south east Queensland (a likely result of the stakeholder suggestions above) 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.

2.2 Large business customers

As noted above, in previous price determinations we have based notified prices for large business customers on the costs of supply in the lowest cost area of regional Queensland (Ergon Distribution's east pricing zone, transmission region one). This approach has encouraged competition in the large business customer market in east pricing zone, transmission region

³¹ Covering letter to the May 2017 delegation (Appendix A).

³² See Schedule 1, National Energy Retail Rules.

³³ Canegrowers, Submission to the QCA interim consultation paper, *Regulated retail electricity prices 2017–18*, 22 December 2016, p. 1.
CCIQ, Submission to the QCA draft determination, *Regulated retail electricity prices 2017–18*, 3 April 2017, p. 4.

³⁴ QCOS, Submission to the QCA draft determination, *Regulated retail electricity prices 2017–18*, 3 April 2017, p. 5.

one. It is also consistent with the Queensland Government's definition of the UTP for 2017–18. However, this approach would not reflect the actual costs of supply in all regions, and would still require the Queensland Government to subsidise electricity prices.

Another approach would be to set fully cost-reflective notified prices. This would encourage competition in regional Queensland outside of east pricing zone, transmission region one, and promote long-term efficient use of electricity services in regional Queensland in the large business customer market. However, it would introduce significant price increases for customers, especially customers in western Queensland and those supplied by isolated systems. We also consider this approach inconsistent with the Queensland Government's UTP for 2017–18.

In its submission received under the November 2016 delegation, Auctus Resources supported basing notified prices for large business customers on the costs of supply in Ergon Distribution's east pricing zone, transmission region one.³⁵

QCA position

Our final decision is to continue basing the notified prices for large business customers in regional Queensland on the lowest costs of supply in regional Queensland, which is Ergon Distribution's east pricing zone, transmission region one. We have also decided to continue estimating the costs of supply for each retail tariff in accordance with 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 decisions on competition in the large business customer market in more detail in Chapter 6.

³⁵ Auctus Resources, Submission to the QCA interim consultation paper, *Regulated Retail Electricity Prices for 2017–18*, 19 December 2016, p. 2.

3 NETWORK COSTS

A retailer incurs network costs when supplying electricity to its customers. These costs are associated with transporting electricity through the transmission and distribution networks and account for around 40 per cent of the final cost of electricity for small customers.

Powerlink, Energex and Ergon Distribution, being regulated monopoly businesses, all 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 approved by the AER.

This chapter sets out the QCA's decisions on the network charges used as the basis of notified prices for 2017–18. Our decisions are largely consistent with the 2016–17 price determination. In summary, we have decided to:

- base the flat rate retail tariffs and controlled load retail tariffs for residential and small business customers (tariffs 11, 20, 31 and 33) on Energex network tariff structures and charges*
- base the seasonal time-of-use retail tariffs for residential and small business customers (tariffs 12A and 22A) on Ergon Distribution network tariff structures and Energex price levels*
- base the seasonal time-of-use demand retail tariffs for residential and small business customers (tariffs 14 and 24) on Ergon Distribution network tariff structures and Energex price levels*
- base the low voltage demand and unmetered supply (excluding street lighting) retail tariffs (tariffs 41 and 91) on Energex network tariff structures and charges*
- base all retail tariffs for large business customers on Ergon Distribution network tariff structures and charges*
- introduce new high voltage retail tariffs for very large business customers, which are based on Ergon Distribution network tariff structures and charges.*

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.

Under the network plus retail (N+R) cost build-up approach that the QCA uses to set notified prices, the network cost component is treated as a pass-through. However, to determine the network cost to be passed through to retail customers, we need to decide:

- (a) the level at which network charges should be set (Energex or Ergon Distribution price level)
- (b) the network tariff structure on which the network cost component should be based (Energex or Ergon Distribution tariff structure).

Network tariff structures can include, for example, combinations of fixed, usage and demand charges. Consistent with our previous price determinations, the network cost components of regulated retail tariffs are based on the network tariff structures and pricing provided by Energex and Ergon Distribution (distributors).

Network tariff structures and charges are established by distributors and approved by the AER. The network cost components for the final determination are based on the latest network pricing that distributors submitted to the AER. While distributors submitted network tariffs to the AER in March 2017, distributors subsequently revised their network tariffs to remove jurisdictional scheme charges³⁶ and submitted these new network tariffs to the AER in June 2017. In the event that the final network tariffs differ from those submitted by the distributors, the QCA will consider using a cost pass-through mechanism as part of the 2018–19 price determination, should the QCA be delegated the task of setting notified prices for 2018–19 (see Chapter 6 for more information on this mechanism).

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

This section discusses the QCA's approach to setting network cost components of retail tariffs for residential, small business and unmetered supply customers, excluding street lighting customers (see section 3.3 for information on the network cost components for large and very large business as well as street lighting retail tariffs).

For the 2017–18 price determination, the May 2017 delegation requires that we consider:

- for residential and small business 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 seasonal 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 2016–17 price determination. Under this approach, the network cost components of retail tariffs for small customers³⁷ would broadly reflect the costs of supplying small customers in south east Queensland and would therefore be consistent with the UTP³⁸.

3.2.1 Energex or Ergon Distribution network price levels

In determining the network cost components of small customer and unmetered supply³⁹ retail tariffs, the first issue the QCA must consider is the level at which network cost components should be set (Energex or Ergon Distribution price level).

QCA position

As discussed in Chapter 2, the QCA's decision is to base notified prices for residential, small business and unmetered supply (excluding street lighting) customers on the cost of supply in south east Queensland. Consistent with this decision, we will set network cost components to reflect Energex network price levels. Setting network cost components at Energex levels means that small customers in regional Queensland will, generally, pay the same for network services as small customers in south east Queensland.

³⁶ Jurisdictional scheme charges include Solar Bonus Scheme feed-in tariff and the Australian Energy Market Commission Levy payments.

³⁷ Residential and small business customers.

³⁸ For more information on the Queensland Government's UTP, see Chapters 1 and 2.

³⁹ Unmetered supply retail tariff referred to in this chapter excludes street lighting related services.

3.2.2 Energex or Ergon Distribution network tariff structures

The second issue the QCA must consider is whether to adopt the network tariff structures of Energex or of Ergon Distribution for small customer and unmetered supply retail tariffs.

Energex and Ergon Distribution offer a variety of network tariffs with different tariff structures for small customers such as flat rate, time-of-use and time-of-use demand tariffs. Flat rate tariffs have a structure where the usage charge rates do not vary with the time and/or level of consumption. In contrast, time-of-use and time-of-use demand tariffs have a structure where the usage and demand charge rates vary with the time of consumption and/or demand.

Key differences between the Energex and Ergon Distribution network tariff structures for small customers include:

- the proportion of costs recovered through fixed charges
- the approach to usage charge rates (for example, 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.

See Appendix D for further information on differences between the network tariff structures.

Flat rate and controlled load retail tariffs

The May 2017 delegation directs us to consider adopting Energex network tariff structures for the residential and small business flat rate retail tariffs (tariffs 11 and 20) and controlled load tariffs (tariffs 31 and 33).

In its submission received under the November 2016 delegation, Energy Queensland considered that all residential and small business retail tariffs should be based on Ergon Distribution network tariff structures, on the basis that it would be a further step towards improving cost reflectivity.⁴⁰ However, this would result in a change of network tariff structure for residential and small business flat retail tariffs and controlled load tariffs, as these tariffs were based on Energex network tariff structure in the 2016–17 price determination.⁴¹ Such a change would also have significant distributional impacts on customers on these tariffs—with lower-usage customers in particular likely to face substantially higher bills.⁴²

In submissions received under the November 2016 delegation, QCOSS⁴³ and Queensland Consumers Association⁴⁴ stated that they did not support using the Ergon Distribution inclining

⁴⁰ Energy Queensland, Submission on the QCA interim consultation paper, *Regulated retail electricity prices for 2017–18*, 7 December 2016.

Energy Queensland, Submission on the QCA draft determination, *Regulated retail electricity prices for 2017–18*, 4 April 2017.

⁴¹ During 2016–17, Energex offered flat rate network tariffs as default tariffs for residential and small business customers and controlled load network tariffs without fixed charges. Energex will continue this approach in 2017–18. In contrast, Ergon Distribution will offer inclining block network tariffs as default tariffs for residential and small business customers and controlled load network tariffs with fixed charges in 2017–18.

⁴² See Appendix D for more information on the customer impacts.

⁴³ Queensland Council of Social Service, Submission on the QCA interim consultation paper, *Regulated retail electricity prices for 2017–18*, 7 December 2016.

⁴⁴ Queensland Consumers Association, Submission on the QCA interim consultation paper, *Regulated retail electricity prices for 2017–18*, 7 December 2016.

block network tariff structure as the basis for the main residential flat rate retail tariff (tariff 11) as they considered that the change in the tariff structure would create confusion and impact adversely on smaller usage customers.

In submissions received under the November 2016 delegation, QCOSS reiterated its support for using Energex network tariff structure as the basis for tariff 11,⁴⁵ and the Chamber of Commerce and Industry Queensland (CCIQ) supported using Energex network tariff structure as the basis for tariff 20.⁴⁶

Moreover, Ergon Distribution has acknowledged that its inclining block network tariffs will, over time, need to be phased out in favour of more cost-reflective network tariffs that better satisfy the pricing principles in the National Electricity Rules (NER).⁴⁷ This suggests that there may be some uncertainty about the future of these network tariff structures. The QCA considers it would be preferable to have a higher degree of certainty about the future of Ergon Distribution network tariff structures before making any major changes that would affect nearly all customers in regional Queensland.

Given the reasons above, we have decided to base residential and small business flat retail tariffs and controlled load tariffs on Energex network tariff structures.

Time-of-use and time-of-use demand retail tariffs

For residential and small business seasonal time-of-use retail tariffs (tariffs 12A and 22A) and time-of-use demand retail tariffs (tariffs 14 and 24), we have been directed to consider adopting Ergon Distribution network tariff structures.

We consider that using Ergon Distribution network tariff structures for the seasonal time-of-use and time-of-use demand retail tariffs would be more cost-reflective than using Energex network tariff structures.

Furthermore, we consider that it is more important that the seasonal time-of-use and time-of-use demand retail tariffs reflect Ergon Distribution network tariffs structures, as these retail tariffs send signals to customers about the network costs incurred by retailers that arise due to the time and/or level of electricity usage and demand.

As noted by the AER, time-of-use and demand tariffs are generally more cost-reflective than flat rate and inclining block tariffs.⁴⁸ The May 2017 delegation also points out that using Ergon Distribution network tariff structures for seasonal time-of-use and time-of-use demand retail tariffs would enhance the underlying network price signals and therefore encourage customers to reduce usage during peak periods on Ergon Distribution's network. In submissions received under the November 2016 delegation, Canegrowers Isis⁴⁹ and CCIQ⁵⁰ supported using Ergon Distribution network tariff structures and Energex price levels as the basis for setting seasonal time-of-use retail tariffs.

⁴⁵ Queensland Council of Social Service, Submission on the QCA draft determination, *Regulated retail electricity prices for 2017–18*, 7 April 2017.

⁴⁶ Chamber of Commerce and Industry Queensland, Submission on the QCA draft determination, *2017–18 Regulated retail electricity prices*, 3 April 2017.

⁴⁷ Ergon Distribution, *Tariff Structure Statement 2017–18 to 2019–20*, November 2015, p. 36.

⁴⁸ AER, *Draft Decision—Tariff Structure Statement Proposal—Energex and Ergon Energy*, August 2016.

⁴⁹ Canegrowers Isis, Submission on the QCA interim consultation paper, *Regulated retail electricity prices for 2017–18*, 7 November 2016.

⁵⁰ Chamber of Commerce and Industry Queensland, Submission on the QCA draft determination, *2017–18 Regulated retail electricity prices*, 3 April 2017.

Given these reasons, we have decided to base residential and small business seasonal time-of-use and time-of-use demand retail tariffs on Ergon Distribution network tariff structures.

Unmetered supply (excluding street lighting) retail tariff

Consistent with the 2016–17 price determination, we have decided to base retail tariff 91 (unmetered supply) on the relevant Energex network tariff structures.

Low voltage demand retail tariff

Tariff 41 is a low voltage demand retail tariff available to small business customers in regional Queensland. It has fixed, usage and demand charges and is based on an Energex network tariff (network tariff code: 8300). Ergon Distribution does not have an equivalent network tariff available for small customers.

While Energex designates network tariff 8300 as a large business customer network tariff, it is made available to small business customers on a voluntary basis. In the 2016–17 price determination, we decided to retain tariff 41, on the basis that small business customers in south east Queensland would have access to this Energex network tariff.

For the same reason, we have decided to retain tariff 41 and to continue basing it on the relevant Energex network tariff structure.

QCA position

The QCA's decision is to use:

- Energex network tariff structures as the basis for setting the network cost components of flat rate, controlled load, unmetered supply and low voltage demand retail tariffs (tariffs 11, 20, 31, 33, 41 and 91)
- Ergon Distribution network tariff structures as the basis for setting the network cost components of seasonal time-of-use and time-of-use demand retail tariffs (tariffs 12A, 22A, 14 and 24).

3.2.3 Adjusting network charges towards Energex price levels while retaining Ergon Distribution tariff structures

As discussed, the QCA's decision is to use Ergon Distribution network tariff structures as the basis for setting seasonal time-of-use and time-of-use demand retail tariffs for residential and small business customers, while reducing the network cost components to Energex price levels.

Consistent with the 2016–17 price determination, the QCA has 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
- preserve the relativities between different pricing components within a network tariff to the greatest extent possible.

To adjust the network cost components to Energex price levels, we have used the same adjustment approach as in the 2016–17 determination. This involves adjusting:

- the residential seasonal time-of-use retail tariff (tariff 12A) by adopting Ergon Distribution usage cost components and reducing the Ergon Distribution fixed cost component towards Energex price levels. As a result, the overall level of network cost components has been reduced to a level where regional residential customers will, on average, pay the same as they would on a residential flat tariff in south east Queensland.

- the small business seasonal time-of-use retail tariff (tariff 22A) by adopting the Energex fixed cost component and reducing Ergon Distribution usage cost components towards Energex price levels. As a result, the overall level of network cost components has been reduced to a level where regional small business customers will, on average, pay the same as they would on a small business flat tariff in south east Queensland.
- the residential and small business seasonal time-of-use demand tariffs (tariffs 14 and 24) by uniformly decreasing the Ergon Distribution fixed, usage and demand cost components towards Energex price levels. As a result, the overall level of network cost components has been reduced to a level where regional residential or small business customers will, on average, pay the same as they would on a residential or small business flat tariff respectively in south east Queensland.

Appendix D provides more information on the adjustment approaches.

QCA position

The QCA's decision is to adjust:

- the residential seasonal time-of-use retail tariff (tariff 12A) by adopting Ergon Distribution usage cost components and reducing the Ergon Distribution fixed cost component towards Energex price levels
- the small business seasonal time-of-use retail tariff (tariff 22A) by adopting the Energex fixed cost component and reducing Ergon Distribution usage cost components towards Energex price levels
- the residential and small business seasonal time-of-use demand tariffs (tariffs 14 and 24) by uniformly decreasing the Ergon Distribution fixed, usage and demand cost components towards Energex price levels.

3.2.4 Network cost components for 2017–18

The QCA's decision is to base regulated retail tariffs for residential, small business and unmetered supply customers on:

- Energex network tariff structures and cost components for retail tariffs 11, 20, 31, 33, 41 and 91
- Ergon Distribution network tariff structures and adjusted cost components for retail tariffs 12A, 22A, 14 and 24. To maintain consistency with the UTP, the level of network cost components has been adjusted to a level where regional customers will, on average, pay the same as they would pay on flat rate tariffs in south east Queensland.

Our decision on the network tariff structures and charges to apply to each retail tariff are presented in the following tables.

Table 1 Energex network charges for 2017–18 for retail tariffs 11, 20, 31, 33, 41 and 91 (GST exclusive)

<i>Retail tariff</i>	<i>Energex network tariff code</i>	<i>Fixed charge^a c/day</i>	<i>Usage charge c/kWh</i>	<i>Demand charge \$/kW/month</i>
Tariff 11—Residential (flat rate)	8400	47.100	9.267	
Tariff 20—Business (flat rate)	8500	63.900	10.510	
Tariff 31—Night rate (super economy)	9000		5.547	
Tariff 33—Controlled supply (economy)	9100		7.592	
Tariff 41—Low voltage (demand) ^b	8300	443.500	0.738	22.130
Tariff 91— Unmetered	9600		8.339	

a Charged per metering point.

b The kVA equivalent demand charge for tariff 41 is \$19.979/kVA/month. A conversion factor of 0.9028 has been used, as advised by Energex.

Table 2 Calculated network charges for 2017–18 for retail tariffs 12A, 14, 22A and 24 (GST exclusive)

<i>Retail tariff</i>	<i>Fixed charge^a c/day</i>	<i>Usage charge (peak) c/kWh</i>	<i>Usage charge (off-peak or flat) c/kWh</i>	<i>Demand charge (peak) \$/kW/month</i>	<i>Demand charge (off-peak) \$/kW/month</i>
Tariff 12A—Residential (time-of-use)	49.685	39.435	5.141		
Tariff 22A—Business (time-of-use)	63.900	35.398	7.262		
Tariff 14—Residential (time-of-use demand)	7.687		2.026	56.335	8.500
Tariff 24—Business (time-of-use demand)	9.414		3.041	85.742	9.052

a Charged per metering point.

3.3 Network tariffs for large business, very large business and street lighting customers

For the 2016–17 price determination, the QCA based retail tariffs for large⁵¹ and very large⁵² business customers as well as street lighting customers on the network tariffs and charges applicable in Ergon Distribution’s east pricing zone, transmission region one. We have decided to continue with this approach for 2017–18, as it is consistent with our decision, discussed in

⁵¹ Large business customers are Standard Asset Customers (SACs) (Large), typically consuming more than 100 MWh but less than 4 GWh per annum.

⁵² Very large business customers consist of Connection Asset Customers (CACs), typically consuming more than 4 GWh but less than 40 GWh per annum and Individually Calculated Customers (ICCs), typically consuming more than 40 GWh per annum.

Chapter 2, to set notified prices for these customers based on the lowest costs of supply in regional Queensland.

In submissions received under the November 2016 delegation, Energy Queensland⁵³ and Auctus Resources⁵⁴ supported maintaining this approach for 2017–18.

3.3.1 High voltage retail tariffs—tariffs 47 and 48

In its submission on the 2016–17 price determination, Ergon Distribution requested that the QCA consider using different network tariff(s) as the basis for setting tariff 48 and restricting access to tariff 47 to existing customers. Ergon Distribution proposed these changes because it intended to discontinue its Standard Asset Customer—Large, Demand High Voltage (SAC–L HV) network tariff, which underpins tariffs 47 and 48, in 2017–18. Tariff 47 can be accessed by large business customers, while tariff 48 is available to very large business customers (Connection Asset Customers (CACs) and Individually Calculated Customers (ICCs)).

However, we considered that any changes to tariffs 47 and 48 should be subject to more extensive consultation, given the potentially significant adverse impacts on some customers. On that basis, we decided to leave tariffs 47 and 48 unchanged then as these changes were not canvassed in the 2016–17 interim consultation paper.

As Ergon Distribution has advised that it still intends to discontinue the SAC–L HV network tariff, this issue was canvassed as part of the interim consultation paper for the 2017–18 price determination. Given the cessation of this network tariff, the QCA has decided to close tariffs 47 and 48 to new customers and implement transitional arrangements for existing customers on these tariffs (see Chapter 7 for more information on these arrangements).⁵⁵

In light of this decision, we need to ensure that alternative retail tariffs are available. While large business customers will have access to alternative standard tariffs such as tariffs 44, 45, 46 and 50, there are no alternative tariffs for very large business customers. This section explains our proposal to set new high voltage retail tariffs for very large business customers.

Connection Asset Customer network tariffs

Prior to July 2015, each of the 177 CAC customers was priced individually on the network level (with varying rates and tariff structures) to take into account their relative share of asset use and the assets built for their specific connection.⁵⁶ To set notified prices based on Ergon Distribution individually priced CAC network tariffs would have required us to establish 177 different retail tariffs under the N+R cost build-up approach. As such, in previous determinations, we have decided against setting retail tariffs for CACs based on individually priced CAC network tariffs, instead setting a single retail tariff based on the SAC–L HV network tariff.

⁵³ Energy Queensland, Submission on the QCA interim consultation paper, *Regulated retail electricity prices for 2017–18*, 7 December 2016.

⁵⁴ Auctus Resources, Submission on the QCA interim consultation paper, *Regulated retail electricity prices for 2017–18*, 6 December 2016.

⁵⁵ We have decided to classify tariffs 47 and 48 as obsolete, which means closing them to new customers. Existing customers would be able to remain on these tariffs during the transitional period. However, if an existing customer switched to a different retail tariff, they would not be able to switch back to tariffs 47 or 48. See Chapter 7 for more information on these arrangements.

⁵⁶ Ergon Energy, *Questions and Answers—For customers using MORE than 4GWh a year*, March 2015, at https://www.ergon.com.au/__data/assets/pdf_file/0004/261364/QA-for-customers-using-MORE-than-4GWh.pdf.

As part of its network tariff reform process, Ergon Distribution has standardised the network tariffs applicable to CACs into four CAC standard tariffs and three CAC seasonal time-of-use demand (STOUD) tariffs. The accessibility of these network tariffs is determined by the customer's connection voltage.

The four CAC standard network tariffs have six charging components:⁵⁷

- an actual demand charge (\$/kVA/month), which applies to the customer's actual kVA monthly maximum demand
- an excess reactive power charge (\$/excess kVAr/month), which applies to the kVAr used by a customer that exceeds the customer's permissible quantity⁵⁸
- a capacity charge (\$/kVA of Authorised Demand/month), which applies to the customer's individual kVA authorised demand or, if there is no authorised demand, the annual maximum demand in the previous full pricing period prior to the setting of prices
- a fixed charge (\$/day)
- a connection unit charge (\$/day/connection unit)
- an any time energy charge (\$/kWh of total energy consumed).

The three CAC STOUD network tariffs have seven charging components:⁵⁹

- a peak demand charge (\$/kVA/month), which applies to the customer's maximum kVA demand recorded between 10am to 8pm during summer⁶⁰ weekdays
- an excess reactive power charge (\$/excess kVAr/month), applies to the kVAr used by a customer that exceeds the customer's permissible quantity⁶¹
- a capacity charge (\$/kVA of Authorised Demand/month), which applies to the greater of either the customer's authorised demand or the actual monthly half hour maximum demand⁶²
- a fixed charge (\$/day)
- a connection unit charge (\$/day/connection unit)
- peak energy charge (\$/kWh of energy consumed), which applies to the total energy consumed during summer months⁶³
- off-peak energy charge (\$/kWh of energy consumed), which applies to the total energy consumed during non-summer months.⁶⁴

⁵⁷ The network charging components consist of both the distribution use of system charges and transmission use of system charges.

⁵⁸ A customer's permissible kVAr quantity is determined by the customer's authorised demand and the National Electricity Rules compliant power factor.

⁵⁹ The network charging components consist of both the distribution use of system charges and transmission use of system charges.

⁶⁰ Summer months are December, January and February.

⁶¹ A customer's permissible kVAr quantity is determined by the customer's authorised demand and the National Electricity Rules compliant power factor.

⁶² The monthly actual maximum demand is measured all year excluding summer peak demand window times (i.e. 10 am to 8 pm during summer weekdays).

⁶³ Summer months are December, January and February.

⁶⁴ Non-summer months are March to November.

More information on Ergon Distribution network tariffs is available on its website at <https://www.ergon.com.au/network/network-management>.

Considerations

Ergon Distribution has proposed the introduction of new high voltage retail tariffs for CACs underpinned by its CAC network tariffs on the basis that this would improve cost reflectivity by passing through the relevant network price signals.

In its submission received under the November 2016 delegation, Energy Queensland reiterated its support for the introduction of new retail tariffs for CACs underpinned by Ergon Distribution CAC network tariffs.⁶⁵

The standardisation of CAC network tariffs has made it feasible for the QCA to consider basing high voltage retail tariffs on Ergon Distribution CAC network tariffs. We consider this would improve cost reflectivity relative to retail tariff 48. Given this, and consistent with the N+R approach, we have decided to introduce seven new CAC retail tariffs, underpinned by the relevant CAC network tariffs.

As the QCA has decided to close tariff 48 to new CACs and ICCs, we also need to consider introducing a new retail tariff for ICCs. At this stage, network tariffs available to ICCs have a standardised tariff structure but the rates are calculated on an individual basis to reflect the specific supply requirements of a site's load requirements. We consider the approach of setting notified prices based on the individually priced ICC network tariffs infeasible, as it will require us to set individually priced retail tariffs for ICCs.

Ergon Distribution advised that among the standardised network tariffs available to very large business customers, its CAC standard network tariff HVL (High Voltage Line–22/11kV Line) is the most suitable base for an ICC retail tariff as it is closest to cost reflectivity for ICCs on a network level. Energy Queensland supported the establishment of a new retail tariff for ICCs based on the Ergon Distribution CAC standard network tariff HVL.⁶⁶

Given this advice, the QCA has decided to introduce a new ICC retail tariff underpinned by Ergon Distribution CAC standard network tariff HVL, on the basis that it improves cost reflectivity relative to retail tariff 48.

QCA position

The QCA's decision is to:

- introduce seven high voltage retail tariffs for CACs, underpinned by Ergon Distribution CAC standard network tariffs and CAC STOUT network tariffs
- introduce one high voltage retail tariff for ICCs, underpinned by the Ergon Distribution CAC standard network tariff HVL.

3.3.2 Network cost components for 2017–18

The QCA's decision is to continue to base retail tariffs for large business customers and street lighting customers on the network tariffs applying to Ergon Distribution's east pricing zone, transmission region one. We have also decided to introduce new high voltage retail tariffs for

⁶⁵ Energy Queensland, Submission on the QCA interim consultation paper, *Regulated retail electricity prices for 2017–18*, 7 December 2016.

⁶⁶ Energy Queensland, Submission on the QCA interim consultation paper, *Regulated retail electricity prices for 2017–18*, 7 December 2016.

very large business customers, which are based on Ergon Distribution CAC network tariffs applying to east pricing zone, transmission region one.

Our decision on the network tariff structures and charges to apply to each retail tariff is presented in the following tables.

Table 3 Ergon Distribution network charges for 2017–18 large business and street lighting customer retail tariffs (GST exclusive)

<i>Retail tariff</i>	<i>Ergon Distribution network tariff code</i>	<i>Fixed charge^a</i> <i>c/day</i>	<i>Usage charge (peak)</i> <i>c/kWh</i>	<i>Usage charge (off-peak/flat)</i> <i>c/kWh</i>	<i>Demand charge (peak)</i> <i>\$/kW/month</i>	<i>Demand charge (off-peak/ flat)</i> <i>\$/kW/month</i>
Tariff 44—over 100 MWh small (demand)	EDSTT1	4228.100		1.341		33.915
Tariff 45—over 100 MWh medium (demand)	EDMTT1	14256.600		1.341		25.552
Tariff 46—over 100 MWh large (demand)	EDLTT1	37498.500		1.322		20.915
Tariff 50—seasonal time-of-use (demand)	ESTOUDCT1	3401.000	0.941	3.441	57.155	10.415
Tariff 71—street lighting ^b	EVUT1	0.500		16.819		

a Charged per metering point.

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

Table 4 Ergon Distribution network charges for 2017–18 very large business customer retail tariffs (GST exclusive)

<i>Retail tariff</i>	<i>Ergon Distribution network tariff code</i>	<i>Fixed charge</i>	<i>Usage charge (peak)</i>	<i>Usage charge (off-peak or flat)</i>	<i>Connection unit charge</i>	<i>Capacity charge (off-peak/flat)</i>	<i>Demand charge (peak/flat)</i>	<i>Excess reactive power charge</i>
		<i>c/day</i>	<i>c/kWh</i>	<i>c/kWh</i>	<i>\$/day/unit</i>	<i>\$/kVA of authorised demand/month</i>	<i>\$/kVA/month</i>	<i>\$/excess/kVAr/month</i>
Tariff 51A—over 4 GWh high voltage (CAC 66kV)	EC66T1	22091.200		1.505	9.451	4.234	2.500	4.000
Tariff 51B—over 4 GWh high voltage (CAC 33kV)	EC33T1	15591.200		1.505	9.451	5.058	2.500	4.000
Tariff 51C—over 4 GWh high voltage (CAC 22/11kV Bus)	EC22BT1	14191.200		1.509	9.451	5.815	3.100	4.000
Tariff 51D—over 4 GWh high voltage (CAC 22/11kV Line)	EC22LT1	13391.200		1.524	9.451	11.315	6.200	4.000
Tariff 52A—over 4 GWh high voltage (CAC STOU 33/66kV)	EC66TOUT1	10091.200	1.005	1.405	9.451	6.715	11.000	4.000
Tariff 52B—over 4 GWh high voltage (CAC STOU 22/11kV Bus)	EC22BTOUT1	10091.200	1.009	1.409	9.451	4.715	39.600	4.000
Tariff 52C—over 4 GWh high voltage (CAC STOU 22/11kV Line)	EC22LTOUT1	10091.200	1.024	1.424	9.451	8.715	72.333	4.000
Tariff 53—over 40 GWh high voltage (ICC) ^a	EC22LT1	13391.200		1.524		11.315	6.200	4.000

^a Ergon Distribution advised that ICCs do not incur connection unit charges on a network level.

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*
- (3) *energy losses.*

As with previous price determinations, the QCA has determined energy costs based on advice from ACIL Allen, its consultant. ACIL Allen has estimated that energy costs will increase for all customers in 2017–18, with increases driven primarily by higher wholesale energy costs.

An overview of how each energy cost component was calculated is provided below. A more detailed explanation appears in ACIL Allen's 2017–18 final report.⁶⁷

4.1 Wholesale energy costs

A retailer incurs wholesale energy costs when purchasing electricity from the National Electricity Market (NEM) to meet the electricity demand of its customers. The NEM is a volatile market where prices are settled every half an hour and can range from –\$1000 per megawatt hour (MWh) to \$14,000 per MWh.⁶⁸ Retailers can, and do, adopt a range of strategies to reduce price volatility risk, including:

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

For the 2016–17 price determination, ACIL Allen estimated wholesale energy costs for customers on notified prices using a hedging strategy approach. The QCA considered that ACIL Allen's approach was transparent and best reflected the actual costs retailers incur when purchasing electricity from the NEM. Hedging based strategies have also been adopted by other Australian regulators and endorsed by the Australian Energy Market Commission (AEMC) in its 2013 advice on best practice retail regulation, produced for the Standing Council on Energy and Resources.⁶⁹

In their submissions received under the November 2016 delegation, the Queensland Consumers Association⁷⁰ and QCOSS⁷¹ supported the use of the same hedging strategy methodology used to estimate energy costs for the 2016–17 price determination. Energy Queensland supported a market based approach but raised some concerns regarding the data used to determine energy

⁶⁷ See <http://www.qca.org.au/Electricity/Regional-consumers/Reg-Electricity-Prices>.

⁶⁸ The 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 and is effective from 1 July. The cap to commence 1 July 2017 is \$14,200. For more information, see www.aemc.gov.au.

⁶⁹ AEMC, *Advice on best practice retail price methodology*, final report, 27 September 2013.

⁷⁰ Queensland Consumers Association, Submission on the QCA interim consultation paper, *Regulated electricity prices for 2017–18*, 7 December 2016.

⁷¹ QCOSS, Submission on the QCA draft determination, *Regulated electricity prices for 2017–18*, 3 April 2017.

costs⁷². Canegrowers Isis was concerned that electricity prices were too high, and considered that the energy cost structure should be challenged, as 'ultimately such a system will lead to a failure of the network'.⁷³ Canegrowers recommended that the QCA use Ergon's net system load profile (NSLP⁷⁴) to determine wholesale energy costs rather than Energex's NSLP.⁷⁵

In its final report on estimated energy costs for 2017–18 (2017–18 final report), ACIL Allen has continued to estimate wholesale energy costs using a hedging strategy approach. This is consistent with its approach in previous years. ACIL Allen has also provided a detailed explanation of its calculation of wholesale energy costs in chapter 4 of its 2017–18 final report and has addressed in chapter 3 the issues raised in submissions received under the November 2016 delegation.

As set out in its 2017–18 final report, ACIL Allen has estimated that wholesale energy costs will increase for all retail tariffs in 2017–18 compared with 2016–17. The increase reflects the projected continuation of the increase in gas prices for gas-fired generation and the continued tightening of the supply–demand balance in the NEM due to:

- increased demand from in-field gas compression associated with the liquefied natural gas (LNG) export facilities in Queensland
- the closure of Hazelwood Power Station in 2017 and the continued operation of the Portland aluminium smelter in Victoria
- little new renewable energy capacity entering the market in 2017–18—particularly in Queensland.⁷⁶

ACIL Allen also advised that its wholesale electricity market modelling aligned with the market's expectations of price outcomes in 2017–18. Compared with the QCA's 2016–17 price determination, futures contract prices for 2017–18 on a trade-weighted basis have increased by around:⁷⁷

- \$16.55 per MWh for base contracts
- \$27.67 per MWh for peak contracts
- \$3.26 per MWh for cap contracts.

Figure 7 illustrates the movement in annual trade-weighted quarterly hedging contract prices since the 2013–14 price determination.

⁷² Energy Queensland, Submission on the QCA draft determination, *Regulated electricity prices for 2017–18*, 4 April 2017.

⁷³ Canegrowers Isis, Submission on the QCA interim consultation paper, *Regulated electricity prices for 2017–18*, 7 December 2016.

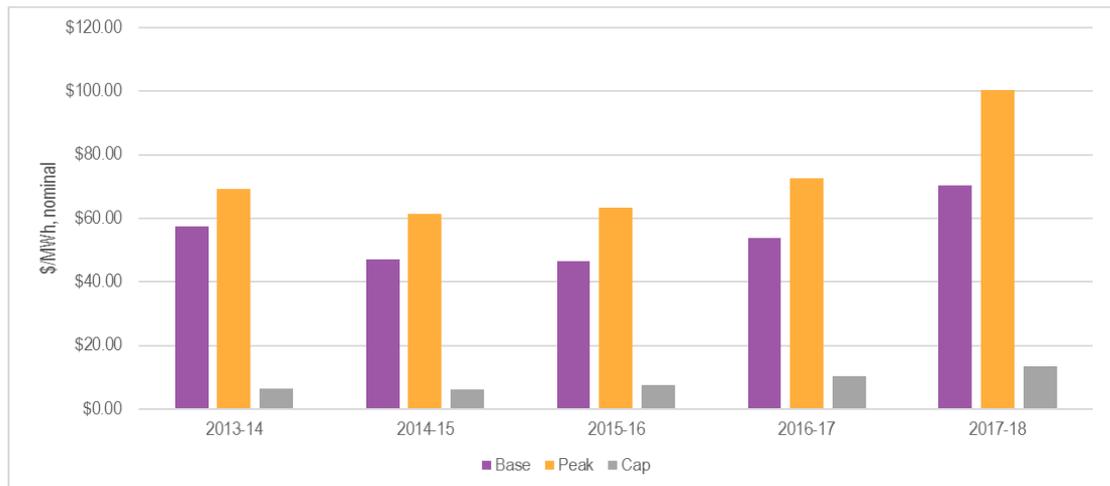
⁷⁴ For more information on NSLPs, see <http://www.aemc.gov.au/getattachment/5615bb69-f5b5-4afe-bc49-6c1a7ea89727/Net-system-load-profile-2012.aspx>.

⁷⁵ Canegrowers, Submission on the QCA draft determination, *Regulated electricity prices for 2017–18*, 3 April 2017.

⁷⁶ While a number of new renewable energy projects are planned or under construction, only a limited amount of new renewable generation will be fully operational in 2017–18, with a number of renewable energy projects likely to commence operation towards the end of, or after, the 2017–18 financial year in mid-2018.

⁷⁷ Based on contracts traded from 15 August 2014 until 3 April 2017.

Figure 7 Annualised quarterly electricity hedging contract prices (\$/MWh), 2017–18 final determination and previous final determinations

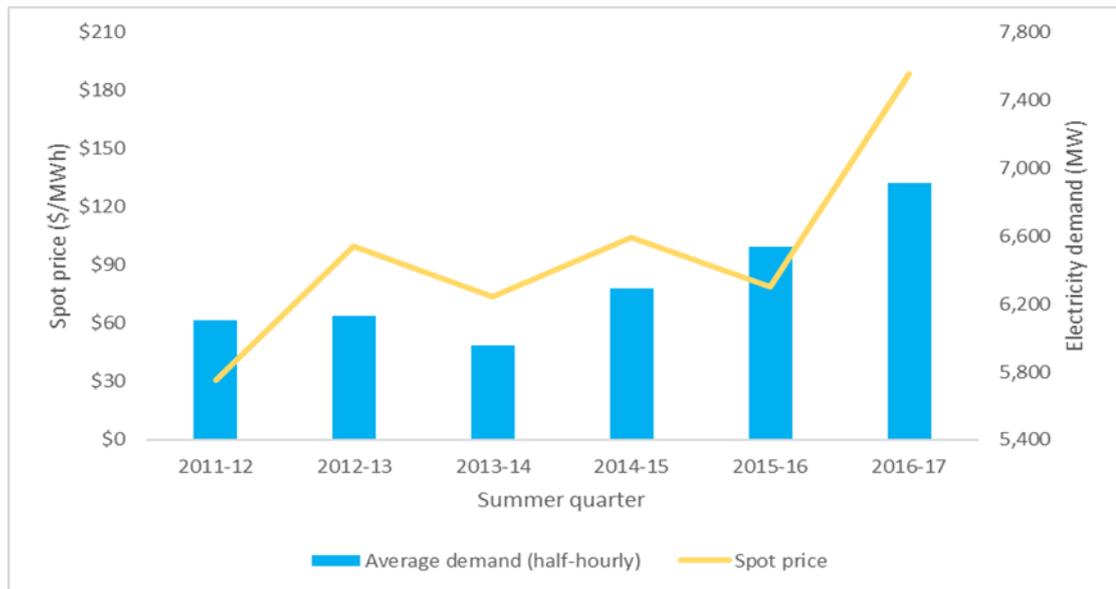


Source: ACIL Allen, *Estimated Energy Costs for 2017–18*, 9 May 2017, p. 13.

In addition to the continued tightening of the supply–demand balance in the NEM, summer weather conditions during 2016–17 may have also caused market participants to revise their price and demand expectations for 2017–18. Queensland's summer in 2016–17 saw a record number of consecutive days over 30 degrees Celsius. This is likely to have contributed to a higher level of electricity demand and higher spot prices relative to those in past years (see Figure 8). Spot price outcomes in Queensland were also far more volatile, with a far greater number of significant high spot price events in the summer of 2016–17 (see Figure 9).⁷⁸ Demand and spot price outcomes in 2016–17 are relevant, as they are likely to be incorporated into market participants' expectations of these variables for 2017–18. It is important to note that spot prices are the prices that retailers purchase electricity at if they are not sufficiently hedged. Consequently, the recent higher and more volatile spot prices, coupled with robust demand for electricity during the 2016–17 summer period, are likely to have contributed to higher contract prices, particularly for the first quarter of 2018.

⁷⁸ A significant high spot price event refers to a half-hour interval where the spot price exceeds \$2000/MWh

Figure 8 Queensland average demand weighted electricity spot price and electricity demand during summer: 2011–12 to 2016–17

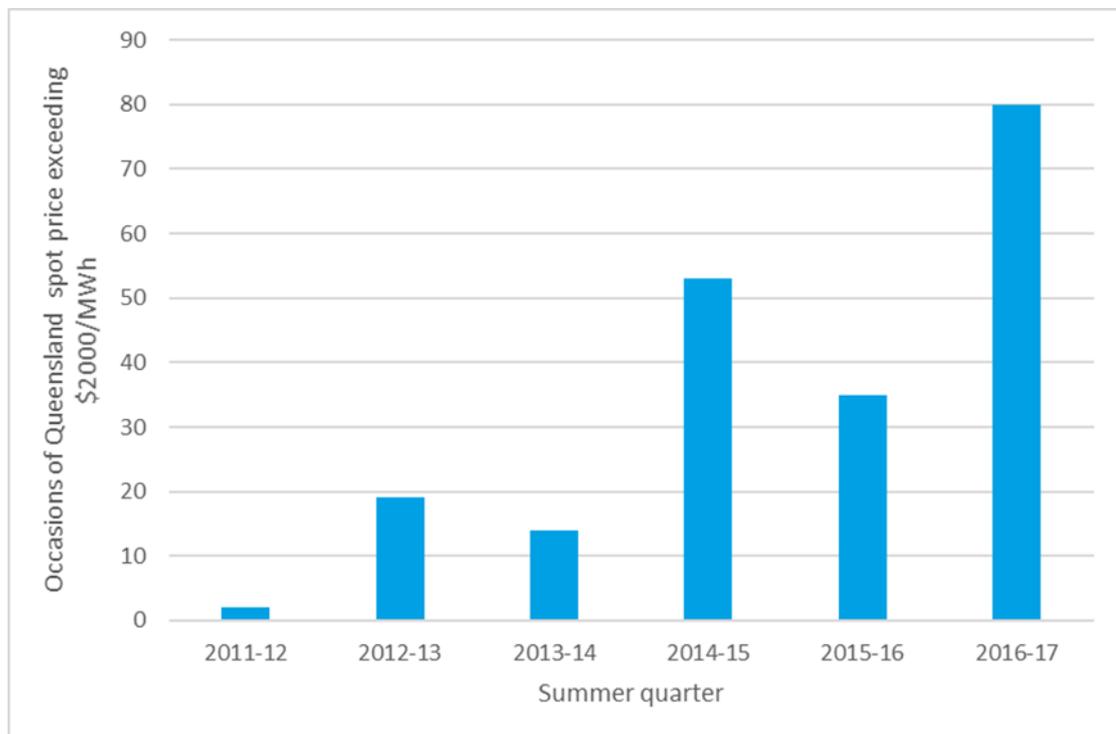


Note: All figures are the average of half-hourly data over summer months (December, January and February) for each year.

Source: AEMO,

<http://www.aemo.com.au/Electricity/National-Electricity-Market-NEM/Data-dashboard#aggregated-data>, data retrieved on 16 March 2017

Figure 9 Frequency of significant high Queensland spot price events during summer, 2011–12 to 2016–17

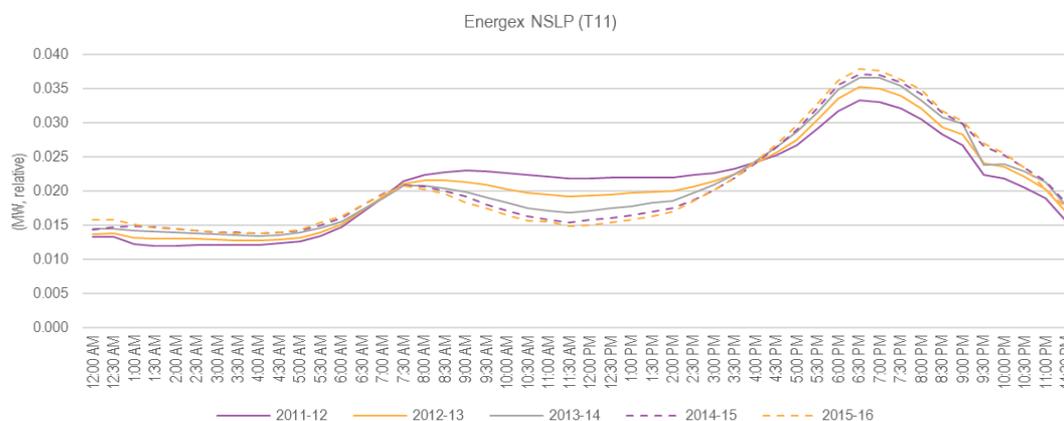


Source: AEMO,

<http://www.aemo.com.au/Electricity/National-Electricity-Market-NEM/Data-dashboard#aggregated-data>, data retrieved on 9 March 2017.

Over the past few years, the Energex NSLP has become peakier due to increased solar generation reducing daytime demand but having no effect on the evening peak demand.⁷⁹ Figure 10 shows how the NSLP has become peakier over time.

Figure 10 Energex NSLP



Note: The term 'relative MW' means the load for each year has been scaled so it sums to one. This removes differences in absolute size over time.

Source: ACIL Allen, Estimated Energy Costs for 2017–18, 9 May 2017, p. 11.

The Energex NSLP has a higher weighting towards the peak periods and, consequently, the highest wholesale energy costs of the profiles analysed in Queensland. The Ergon NSLP is less peaky than the Energex NSLP and therefore has lower wholesale energy costs.

ACIL Allen estimated that wholesale energy costs in 2017–18 will therefore increase as follows:

- The Energex NSLP will increase by 36.9 per cent to \$103.11 per MWh.
- The Ergon NSLP will increase by 41.2 per cent to \$92.75 per MWh.
- The Energex controlled loads (tariffs 33 and 31) will increase by 34.2 per cent to \$75.38 and \$56.76 per MWh respectively.

QCA position

The QCA considers that ACIL Allen's hedging methodology is likely to produce reliable estimates that reflect the efficient costs of supply. Maintaining an approach for 2017–18 that is consistent with the approach used in previous years will also provide certainty to stakeholders.

The QCA's decision is to accept ACIL Allen's advice on this matter and its final wholesale energy cost estimates, which are outlined in Table 5.

Consistent with the UTP⁸⁰, the QCA has used the Energex NSLP wholesale energy costs estimate for residential, small business and unmetered supply (excluding street lighting) customers.

⁷⁹ Peak demand generally occurs between 6.30 pm and 8.30 pm.

⁸⁰ See Chapters 1 and 2 for further detail.

Table 5 Estimated wholesale energy costs at the Queensland regional reference node for 2017–18

Settlement class	Retail tariff	Wholesale energy cost	Change from 2016–17	
		\$/MWh	%	\$
Energex NSLP & unmetered supply	11, 12A, 14, 20, 22A, 24, 41, 91	\$103.11	36.9%	\$27.79
Energex Controlled Load 9000	31	\$56.76	34.2%	\$14.45
Energex Controlled Load 9100	33	\$75.38	34.2%	\$19.23
Ergon Energy NSLP—small, medium, large (SAC) demand & streetlights	44, 45, 46, 50, 71	\$92.75	41.2%	\$27.06
Ergon Energy NSLP—high voltage demand & customers over 4 GWh (SAC HV, CAC & ICC)	51A, 51B, 51C, 51D, 52A, 52B, 52C, 53	\$92.75	41.2%	\$27.06

Source: ACIL Allen, *Estimated energy costs for 2017–18*, 9 May 2017, p. 24.

4.2 Other energy costs

In addition to wholesale energy costs, the QCA must account for the other energy costs that a retailer incurs when it purchases energy 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 incentives are paid by retailers through the purchase of 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 gigawatt hours (GWh) of electricity from large-scale renewable sources.⁸¹ 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 QCA's 2016–17 price determination, ACIL Allen 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 Allen used the 2016 renewable

⁸¹ Section 40, *Renewable Energy (Electricity) Act 2000* (Cth).

power percentage (RPP) for the first half of the pricing period and the latest published 2017 LRET target for the second half of the pricing period.

In its submissions received under the November 2016 delegation, Energy Queensland supported calculating LRET costs using a market-based approach, but noted that the AMFA stopped publishing its forward-looking market LGC prices in September 2016. QCOSS supported the use of the same methodology as for the 2016–17 price determination.

In its 2017–18 final report, ACIL Allen forecast LRET costs using an approach that was largely consistent with previous years. ACIL Allen used AFMA data up until September 2016. However, due to AMFA ceasing publication of this data at the end of September 2016, ACIL Allen used TFS broker data from October 2016 through to April 2017. ACIL Allen examined LGC forward prices provided by TFS prior to September 2016 and was satisfied that they were consistent with AMFA prices, and were suitable for the purpose of contributing to estimating LRET costs.

ACIL Allen has provided a detailed explanation of its calculations in chapter 4 of its 2017–18 final report, along with information on LGC prices and the assumptions underpinning the implied RPPs used. It also addressed issues raised in submissions received under the November 2016 delegation in chapter 3 of its 2017–18 final report. ACIL Allen examined market prices over a number of years and considered that its market-based approach, whereby retailers purchase LGCs over a two-year period to satisfy their obligations, provided the best estimate of LRET costs for the purposes of setting notified prices for 2017–18.

At the time ACIL Allen prepared its 2017–18 final report, LGC spot prices were trading around \$85. Consequently, ACIL Allen has forecast that LRET costs for 2017–18 will be \$11.97 per MWh for all retail tariffs, an increase of \$4.14 per MWh compared to the 2016–17 price determination.

QCA position

The QCA considers that ACIL Allen's market-based approach, using the most up-to-date targets and price information published by AFMA and TFS, is likely to produce the most reliable estimate of LRET costs to be incurred by retailers in 2017–18. Maintaining an approach for 2017–18 that is largely consistent with the approach used in previous years will also provide certainty to stakeholders.

Therefore, the QCA's decision is to accept ACIL Allen's advice on this matter and its final 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 individuals and small businesses.

For the 2016–17 price determination, ACIL Allen estimated SRES costs using the final 2016 small-scale technology percentage (STP) and the latest available non-binding 2017 STP target for the second half of the pricing period. STC prices were based on the clearing house price.

In its 2017–18 final report, ACIL Allen estimated SRES costs using the same approach as 2016–17. Its forecast of \$3.01 per MWh was based on the on the latest available non-binding STP targets.

QCA position

The QCA considers that ACIL Allen's approach is likely to produce the most reliable estimate of SRES costs to be incurred by retailers in 2017–18. Maintaining a consistent approach for 2017–18 will also provide certainty to stakeholders.

Therefore, the QCA accepts ACIL Allen's advice on this matter and its final SRES cost estimates, which are outlined in Table 6.

4.2.2 NEM participation fees and ancillary services charges

Retailers purchasing electricity from the NEM are required to pay NEM participation fees⁸² and ancillary services charges to AEMO. NEM participation fees are levied by AEMO to cover the costs of operating the NEM, the costs associated with full retail contestability, and the costs of funding Energy Consumers Australia. Ancillary services charges cover the costs of the services used by AEMO to manage power system safety, security and reliability.

For the 2016–17 price determination, ACIL Allen used AEMO's budget and fee projections to estimate NEM participation fees. Its estimate of ancillary services charges was based on the average historical costs observed over the preceding 52 weeks.

In its 2017–18 final report, ACIL Allen used the projected NEM participation fees from AEMO's *2017–18 Draft Budget and Fees report*. Consistent with its approach in 2016–17, ACIL Allen's estimate of ancillary service charges was based on the average historical costs observed over the preceding 52 weeks.

QCA position

The QCA considers that ACIL Allen's approach is likely to produce the most reliable estimate of NEM participation and ancillary services costs to be incurred by retailers in 2017–18. Maintaining an approach for 2017–18 that is consistent with the approach in previous years will also provide certainty to stakeholders.

Therefore, the QCA's decision is to accept ACIL Allen's advice on this matter and its final 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 the wholesale energy costs estimates. For the 2016–17 price determination, ACIL Allen estimated prudential capital costs in line with the latest published AEMO requirements and margin requirements for trading in the futures market.

In its submission received under the November 2016 delegation, QCOSS supported the use of the same methodology to estimate energy costs, including prudential costs, as for the 2016–17 price determination. Canegrowers proposed that the energy component, including prudential costs should be based on the Ergon NSLP.

In its 2017–18 final report, ACIL Allen used an approach that is largely consistent with its 2016–17 approach. However, it refined the methodology for estimating the hedge prudential

⁸² In its 2017–18 final report, ACIL Allen refers to these fees as 'NEM management fees'.

costs component to take into account the relative proportion of each type of contract used in its hedge model and any over-contracting modelled in that hedge model.⁸³

QCA position

The QCA considers that ACIL Allen's approach is likely to produce the most reliable estimate of prudential capital costs to be incurred by retailers in 2017–18. We consider the use of the Energex NSLP to calculate prudential costs is appropriate, given that under the Queensland Government's UTP⁸⁴ most customers in regional Queensland will pay notified prices that are based on energy costs in south east Queensland.

Therefore, the QCA's decision is to accept ACIL Allen'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 2017–18

Table 6 sets out the estimates of other energy costs for 2017–18, which will be added to the wholesale energy cost components of all retail tariffs.

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

<i>Cost component</i>	<i>\$/MWh</i>	<i>% change from 2016–17</i>
LRET	\$11.97	52.9%
SRES	\$3.01	–19.5%
NEM fees	\$0.53	10.4%
Ancillary services	\$0.34	3.0%
Prudential capital	\$2.53	155.6%
Total	\$18.38	37.5%

Note: Totals may not add due to rounding.

Source: ACIL Allen, Estimated Energy Costs for 2017–18, 9 May 2017, pp. 28, 31.

4.3 Energy losses

Some electricity is lost when it is transported over transmission and distribution networks to customers. As a result, retailers must purchase additional electricity to allow for these losses when supplying customers.

Consistent with its approach in 2016–17, ACIL Allen has accounted for energy losses by applying transmission and distribution loss factors published by AEMO in a manner that aligns with AEMO's settlement process. These losses are based on AEMO's 2017–18 published loss factors.

QCA position

The QCA's decision is to accept ACIL Allen's advice on this matter and its loss factor calculations, which are outlined in Table 7.

⁸³ For previous price determinations, ACIL Allen used baseload contracts as proxies for hedge prudential costs. Consistent with the approach in previous price determinations, for its 2017–18 final report, ACIL Allen has calculated prudential costs based on the Energex NSLP.

⁸⁴ See Chapters 1 and 2 for more detail.

4.4 Total energy cost allowances for 2017–18

Table 7 summarises the QCA’s decision on energy cost allowances for each retail tariff for 2017–18.

Table 7 Final decision—total energy cost allowances for 2017–18

Settlement class	Retail tariff	Wholesale energy	Other Energy	Energy losses	Total energy allowance		Change from 2016–17
		\$/MWh	\$/MWh	%	\$/MWh	c/kWh	%
Energex NSLP & unmetered supply	11, 12A, 14, 20, 22A, 24, 41, 91	\$103.11	\$18.38	6.5%	\$129.39	12.939	36.99%
Energex Controlled Load 9000	31	\$56.76	\$18.38	6.5%	\$80.02	8.002	34.94%
Energex Controlled Load 9100	33	\$75.38	\$18.38	6.5%	\$99.85	9.985	34.86%
Ergon Energy NSLP—small, medium, large (SAC) demand & streetlights	44, 45, 46, 50, 71	\$92.75	\$18.38	7.9%	\$119.91	11.991	35.42%
Ergon Energy NSLP—high voltage demand & customers over 4 GWh (SAC HV, CAC & ICC)	51A, 51B, 51C, 51D, 52A, 52B, 52C, 53	\$92.75	\$18.38	1.4%	\$112.69	11.269	35.49%

Note: Totals may not add due to rounding.

Source: ACIL Allen, Estimated Energy Costs for 2017–18, 9 May 2017, p. 33.

5 RETAIL COSTS

The second element of the R component is retail costs, which include retail operating costs and a retail margin.

The QCA will maintain existing retail cost allowances by:

- *adjusting fixed retail cost allowances for residential and small business customers to account for inflation, and maintaining variable retail cost allocators at 11.27 per cent for residential customers and 12.8 per cent for small business customers, and*
- *adjusting fixed retail cost allowances for large customers to account for inflation, and maintaining the variable retail cost allocators at 6.0445 per cent.*

5.1 Background

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, and 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.

Prior to the 2016–17 determination, we estimated allowances for retail costs based on publicly reported data and benchmark observations of other regulatory decisions. Residential and small business allowances were predominantly based on those of the Independent Pricing and Regulatory Tribunal (IPART). Once established, these allowances were maintained in real terms by adjusting them by the forecast change in the Consumer Price Index (CPI), and then applying a retail margin.

For our 2016–17 price determination, we conducted a comprehensive review of the retail cost components of retail tariffs. As part of that review, we engaged ACIL Allen to provide advice on efficient retail costs. ACIL Allen used a combination of bottom-up and benchmarking methods to estimate retail costs for residential and small business customers, informed by analysis of publicly available data, observed market offers, and detailed confidential information provided by retailers. We established separate retail cost allowances for residential and small business customers, based on the averages of ACIL Allen's benchmarking observations.

For large and very large business customers there was insufficient data to establish new benchmarks. ACIL Allen advised that there was no compelling evidence that the retail costs varied materially from the QCA's previous allowances. As a result, we based large business customer retail costs on our 2015–16 allowances, adjusted fixed retail components by forecast inflation (to maintain them in real terms) and then applied the relevant variable retail cost allocators.⁸⁵

⁸⁵ See Appendix E for more information on variable retail cost allocations.

We provided stakeholders with a full and comprehensive explanation of the methodology, the data used, and how it was applied, in our 2016–17 price determination and ACIL Allen's reports, which are available on the QCA's [website](#).⁸⁶

We noted in our 2016–17 determination that this thorough bottom-up and benchmark review of efficient retail cost allowances was costly and time-consuming, placed a significant reporting burden on electricity retailers, and that it was likely the cost of doing that exercise on a yearly basis would outweigh any incremental benefit over the short term. Rather, we envisaged that the thorough review of retail costs for the 2016–17 determination should produce robust estimates that could then be updated annually, using a defined escalation method.

Submissions received under the November 2016 delegation

QCOSS did not see the need to redo the calculations from 2016–17 and considered that the retail cost allowances established in the 2016–17 final determination were an appropriate starting point for setting prices for 2017–18. QCOSS argued that retail costs should be indexed down to reflect public statements by retailers AGL and Origin Energy that they were seeking increased efficiencies, and had reported reductions in their cost to serve per customer across Australia.

Canegrowers Isis considered that retail cost allowances should be fixed for a period of up to five years to encourage greater retailer efficiency.

CCIQ believed that the QCA should 'revisit reviewing the cost to retail'.⁸⁷ While CCIQ acknowledged that changes in retail costs in the 2017–18 draft determination were minimal, when these changes were coupled with changes in 2016–17 and previous years they resulted in price determinations which were unsustainable and inconsistent with 'the State Government's commitment to Queensland small business that electricity pricing is stabilising and coming down'.⁸⁸

Canegrowers considered that the QCA's retail cost estimates were excessive as they contained competition costs, which, it argued, were not incurred by Ergon Retail, and excess margins over efficient costs.

Energy Queensland highlighted the large body of work it faced to implement the Australian Energy Market Commission's Power of Choice⁸⁹ reform package, and that there were a number of reviews which could have an impact on retailer costs in future. Energy Queensland also noted that its customer management costs had increased due to the declining economic conditions in regional Queensland resulting from the end of the mining boom. Origin Energy highlighted the need to maintain both the fixed and variable charges in real terms.

QCA position

The QCA will maintain existing fixed retail cost allowances in real terms, and maintain variable retail cost percentage allocators as the same proportion of other variable costs established in the 2016–17 final price determination. We agree with QCOSS that the retail cost allowances established in 2016–17 are an appropriate starting point for establishing 2017–18 retail cost

⁸⁶ See <http://www.qca.org.au/Electricity/Regional-consumers/Reg-Electricity-Prices>.

⁸⁷ CCIQ, Submission to the QCA draft determination, *Regulated Retail Electricity Prices for 2017–18*, 3 April 2017, p. 4.

⁸⁸ CCIQ, Submission to the QCA draft determination, *Regulated Retail Electricity Prices for 2017–18*, 3 April 2017, p. 4.

⁸⁹ See <http://www.aemc.gov.au/Major-Pages/Power-of-choice>.

allowances. As noted in our 2016–17 determination, we will consider a further detailed review in future, particularly if there were material changes in retail cost drivers.

We note comments from consumer groups who considered that retail allowances should be reduced. While we have considered public statements from AGL and Origin on their cost to serve their customer base, the data provided is not specific to electricity customers and only represents two retailers. In addition, the QCA notes that public statements by AGL and Origin Energy⁹⁰ indicate slightly lower cost to serve per customer account figures and increases in the cost of acquiring customers. As retailers serve a varying mixture of new and existing customers, it is not clear this data establishes that overall retail costs are likely to fall in 2017–18 for these two retailers.

While it is highly unlikely that Ergon Retail will incur the same level of CARC for residential and small business customers as a retailer in south east Queensland (SEQ), that does not mean the retail costs estimated by the QCA are excessive. As discussed in Chapter 2, under the Uniform Tariff Policy (UTP), the QCA must set notified prices, and by extension estimate retail costs, for residential and small business customers based on costs in SEQ. As such, the level of CARC incurred by Ergon Retail is irrelevant to estimating retail costs for residential and small business customers. Removing CARC from retail costs would result in notified prices that are inconsistent with the UTP.

CCIQ is correct that retail cost estimates increased for small business customers in 2016–17. The primary reason is that prior to 2016–17, based on the available information, residential and small business customers were estimated to have the same retail costs. However, when ACIL Allen conducted its analysis, it had access to detailed market information from multiple electricity markets in Australia. This allowed it to estimate retail costs for residential and small business customers separately. The market data clearly showed that retail costs for small business customers were higher than for residential customers. As such, the relative change was a direct result of the QCA having access to more detailed data than in previous determinations. While the QCA could conduct another retail cost review for the final determination, it would utilise the same type of detailed data and it is therefore unlikely that such a review would result in materially different estimates.

As the QCA has no compelling evidence that actual costs have fallen in real terms for retailers in the electricity market, for either residential or small business customers we consider reducing retail cost allowances in real terms would likely result in notified prices below levels that would be consistent with the UTP.

Maintaining retail cost allowances, on the other hand, is consistent with our previous approaches to setting retail prices as well as with the UTP.

For residential and small business customers, retail cost allowances will be maintained by:

⁹⁰ AGL, *Full Year Results Investor Presentation*, 10 August 2016, slide 17; AGL, *Interim Results Investor Presentation*, 10 February 2016, slide 14; Origin Energy, *Operating and Financial Review for the half year ended 31 December 2016*, 16 February 2017, p. 21; Origin Energy, *Operating and Financial Review for the full year ended 30 June 2016*, 18 August 2016, p. 37; Origin Energy, *Operating and Financial Review for the half year ended 31 December 2015*, 31 December 2015, p. 25.

- adjusting fixed retail cost allowances estimated in 2016–17 by the Reserve Bank of Australia's forecast of the change in the CPI for 2017–18⁹¹ to maintain them in real terms, and
- maintaining the variable retail cost percentage allocators at 11.27 per cent for residential customers and 12.8 per cent for small business customers, the same proportions of other variable costs established in the 2016–17 final price determination.

Consistent with the 2016–17 price determination fixed retail cost allowances for large and very large business customers will be adjusted by forecast CPI, and the variable retail cost allocators will be maintained at 6.0445 per cent.

5.2 Retail cost allowances for 2017–18

Tables 8 to 11 set out the retail cost allowances for each regulated retail tariff for 2017–18. Each fixed retail cost component includes an allowance for QCA regulatory fees.

Table 8 Retail costs for residential customers for 2017–18 (GST exclusive)

Retail tariff	Pricing component				
	Fixed retail component (c/day) ^a	Usage (c/kWh)		Demand (\$/kW/month)	
		Peak	Off-peak/flat	Peak	Off-peak/flat
T11	35.884		2.503		
T12A	35.884	5.903	2.038		
T14	35.884		1.687	6.349	0.958
T31			1.527		
T33			1.981		

^a The fixed retail component comprises the benchmark retail fixed component adjusted for inflation and QCA regulatory fees.

Table 9 Retail costs for small business customers for 2017–18 (GST exclusive)

Retail tariff	Pricing component				
	Fixed retail component (c/day) ^a	Usage (c/kWh)		Demand (\$/kW/month)	
		Peak	Off-peak/flat	Peak	Off-peak/flat
T20	50.861		3.001		
T22A	50.861	6.187	2.586		
T24	50.861		2.045	10.975	1.159
T41	50.861		1.751		2.833
T91			2.724		

^a The fixed retail component comprises the benchmark retail fixed component adjusted for inflation and QCA regulatory fees.

⁹¹ We adopted a CPI of 2.0%, which is consistent with the mid-range of the RBA forecast of 1.5%–2.5% for the 12 months to 30 June 2018. See Reserve Bank of Australia, *Statement on Monetary Policy*, November 2016, Table 6.1, p. 57.

Table 10 Retail costs for large business and street lighting customers for 2017–18 (GST exclusive)

Retail tariff	Pricing component				
	Fixed retail component (c/day) ^a	Usage (c/kWh)		Demand (\$/kW/month)	
		Peak	Off-peak/Flat	Peak	Off-peak/Flat
T44	502.316		0.806		2.050
T45	1139.598		0.806		1.544
T46	2685.590		0.805		1.264
T50	466.118	0.782	0.933	3.455	0.630
T71			1.741		

^a The fixed retail component comprises the benchmark retail fixed component adjusted for inflation and QCA regulatory fees.

Table 11 Retail costs for very large business customers for 2017–18 (GST exclusive)

Retail tariff	Pricing component						
	Fixed retail component (c/day) ^a	Usage (c/kWh)		Connect ion Unit	Capacity (flat/off-peak)	Demand (flat/peak)	Excess Reactive Power
		Peak	Off-peak/Flat	(\$/day/unit)	(\$/kVA of AD/mth)	(\$/kVA/mth)	(\$/excess kVA/mth)
T51A	2843.402		0.772	0.571	0.256	0.151	0.242
T51B	2843.402		0.772	0.571	0.306	0.151	0.242
T51C	2843.402		0.772	0.571	0.351	0.187	0.242
T51D	2843.402		0.773	0.571	0.684	0.375	0.242
T52A	2843.402	0.742	0.766	0.571	0.406	0.665	0.242
T52B	2843.402	0.742	0.766	0.571	0.285	2.394	0.242
T52C	2843.402	0.743	0.767	0.571	0.527	4.372	0.242
T53	2843.402		0.773		0.684	0.375	0.242

^a The fixed retail component comprises the benchmark retail fixed component adjusted for inflation and QCA regulatory fees.

6 OTHER ISSUES

This chapter sets out our decisions on the inclusion of an additional allowance above the estimated efficient costs of supply and the application of a cost pass-through mechanism. Our decisions are to:

- *include a 5 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 expected price differential between the lowest offers and standing offers in 2017–18 (consistent with the 2016–17 price determination)*
- *include an allowance for headroom of 5 per cent above the estimated efficient costs of supply for all large and very large business customer tariffs in 2017–18 (consistent with the 2016–17 price determination)*
- *require a negative pass-through of an over-recovery of Small-Scale Renewable Energy Scheme (SRES) costs incurred during 2016–17.*

6.1 Standing offer adjustment—residential and small business customer tariffs

Retail competition in the residential and small business market segment is very limited in regional Queensland. This is largely because of the UTP, which delivers a subsidy to Ergon Retail to supply electricity at notified prices. These prices are, in most cases, well below the cost of supply. As other retailers do not have access to this subsidy, they typically cannot compete with Ergon Retail's subsidised notified prices.

The QCA uses an N+R bottom-up approach to derive the estimated efficient costs of supplying small customers⁹² in south east Queensland, which serves as a basis to set notified prices. In broad terms, this produces price levels that we would expect, on average, to reflect the lowest prices offered by an efficient representative retailer⁹³.

To be consistent with the UTP, the QCA needs to set notified prices for small customers in regional Queensland that broadly reflect the expected level of standing offer prices in south east Queensland (see Chapter 2). To achieve this, we need to add an amount to the estimated efficient costs of supply to account for the expected price differential between lowest offers and standing offers in south east Queensland. This adjustment is referred to as a standing offer adjustment. In the 2016–17 price determination, we set the standing offer adjustment at five per cent of the total estimated efficient cost of supply in south east Queensland.

Retail electricity prices observed in south east Queensland reveal that most retailers' standing offer prices are generally higher than their lowest-priced offers, albeit by varying amounts. The lowest-priced offers of retailers generally are market offers but can be standing offers.

⁹² Small customers are residential and small business customers, as well as customers accessing the unmetered supply (excluding street lighting) retail tariff.

⁹³ An efficient representative retailer which does not adopt a loss leading pricing strategy where electricity is being supplied below cost to attract new customers and/or to sell other/additional products and services to those customers.

Submissions received under the November 2016 delegation

Canegrowers Isis noted that:

Competitive prices should be applied to ensure the SOD (standing offer differential) is restricted to within a commercially competitive range.⁹⁴

The Queensland Consumers Association also submitted that:

Calculation of differentials between SEQ standing offers and market contracts should take account of the extent to which any, or all, standing offers may be above the efficient cost of supply.⁹⁵

Canegrowers submitted that:

allowing a 5 per cent mark up above the costs of goods sold significantly overstates the size of the margin required. In regional Queensland, Ergon faces no customer acquisition cost. Customers have no alternative but to use Ergon retail. The lack of acquisition cost, is likely to more than offset any additional margin to reflect the terms and conditions of the standing offer and any adverse selection bias in the customer base.⁹⁶

QCA position

As discussed, to derive notified prices consistent with the definition of the UTP, we need to set notified prices for small customers based on the estimated efficient costs of supplying small customers in south east Queensland. We also need to adjust the estimated efficient costs of supply in south east Queensland to account for the expected price differential between and lowest-priced and standing offers. This requires us to take into account both market and standing offer prices in south east Queensland. As such, the costs faced by Ergon Retail when serving customers in regional Queensland are irrelevant to setting notified prices for small customers.

Energy Queensland supported our approach to estimating the standing offer differential.⁹⁷

6.1.1 Types of electricity offers

Standing offer prices are the prices that retailers charge under standard retail contracts. These contracts are basic contracts with terms and conditions that are specified by the National Energy Retail Rules (NERR).⁹⁸ In south east Queensland, where prices have been deregulated, standing offer prices are set by retailers. Standard retail contracts are referred to in this report as 'standing offers'.

In contrast, market prices are set by retailers and offered under the terms and conditions of a market retail contract, referred to as 'market offers'. Market retail contracts contain a minimum set of terms and conditions (specified in the NERR⁹⁹). These contracts also include other terms and conditions that are agreed between the retailer and customer. For example, a market retail

⁹⁴ Canegrowers Isis, Submission on the QCA interim consultation paper, *Regulated electricity prices for 2017–18*, 7 December 2016.

⁹⁵ Queensland Consumers Association, Submission on the QCA interim consultation paper, *Regulated electricity prices for 2017–18*, 7 December 2016.

⁹⁶ Canegrowers, Submission on the QCA draft determination, *Regulated electricity prices for 2017–18*, 3 April 2017.

⁹⁷ Energy Queensland, Submission on the QCA interim consultation paper, *Regulated electricity prices for 2017–18*, 7 December 2016.

⁹⁸ NERR, rule 12, schedule 1.

⁹⁹ NERR, rule 14.

contract might offer customers additional discounts based on their billing and payment methods.

6.1.2 Why is there a difference between market and standing offer prices?

There are a number of potential reasons why standing offer prices tend to be higher than market offer prices. This difference likely reflects the fact that standing offers often provide terms and conditions that are more favourable to the customer. The premium included in standing offer prices could be considered compensation to the retailer for accepting the additional costs and risks associated with providing more favourable terms and conditions to customers.

Through market offers, retailers are able to adopt different terms and conditions designed to reduce their costs or risks. This enables retailers to offer lower prices or other incentives to encourage customers to take up market offers. 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 will 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 standing offer prices may also be an indication of different pricing strategies, whereby retailers target different customer segments with different prices, according to their preferences and sensitivity to price changes. For example, retailers focusing on a customer segment that is environmentally conscious may incorporate and promote GreenPower Programs¹⁰⁰, for an additional charge, as a feature of their market offers. Retailers may also adopt different pricing strategies in response to the behaviour of their competitors such as providing loyalty credit that is available to customers only after they have remained with the retailer for a specific period, in order to retain customers.¹⁰¹

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

We have considered the following matters when estimating the expected price differential:

- the experience in other jurisdictions with deregulated retail electricity prices
- observed price differentials in the newly deregulated south east Queensland retail electricity market.

To simplify, we refer to markets with deregulated retail electricity prices as 'deregulated markets'.

Experience in other deregulated jurisdictions

In this section, we discuss the jurisdictional experience of three deregulated retail electricity markets in the NEM, namely Victoria, South Australia (SA) and New South Wales (NSW). We

¹⁰⁰ GreenPower is a voluntary government accredited program that enables a retailer to purchase renewable energy (via the purchase of Large-scale Generation Certificates (LGCs)) on the customer's behalf.

¹⁰¹ AEMC, *2016 Retail Competition Review*, 30 June 2016.

have not discussed the experience of Tasmania and the Australian Capital Territory, as retail price regulation remains in place in these jurisdictions.¹⁰²

Victoria

In a mature market such as Victoria, deregulated since 2009, market offers are priced at a discount to standing offers with these differentials¹⁰³ ranging between zero and 30 per cent.¹⁰⁴

South Australia

When the SA retail market was deregulated in February 2013, the SA 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 standing offers for two years.¹⁰⁵

Since the removal of those restrictions in February 2015, the Essential Services Commission of South Australia (ESCOSA) reported that market offers are generally priced at a discount to standing offers with an average differential of around 9.6 per cent for both residential and small business tariffs as at 30 June 2016. The price differentials for residential customers were between zero and 22 per cent. Similarly, differentials between zero and 25 per cent were observed for small business customers.¹⁰⁶

New South Wales

When the NSW retail market was deregulated on 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 standing or 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. As at June 2015, around 20 per cent of electricity customers in NSW remained on transitional tariffs with the remaining 80 per cent on either standing or market offers.¹⁰⁷

In its 2016 review of the competitiveness of the retail market in NSW, IPART reported that the pricing differentials between standing offers and lowest-priced offers for residential customers were between 18 and 27 per cent from June 2015 to June 2016 (depending on the network area). Similarly, the differentials for small business customers were between 18 and 25 per cent.¹⁰⁸

¹⁰² AEMC, *2016 Retail Competition Review*, 30 June 2016.

¹⁰³ These differentials are derived from offers available to residential customers from September 2013 to October 2015 in Victoria (CitiPower supply area). The AEMC noted that similar results can be observed in every supply area in Victoria.

¹⁰⁴ AEMC, *2016 Retail Competition Review*, 30 June 2016.

¹⁰⁵ Weatherill, J & Koutsantonis, T, *Lower prices for South Australia*, media release, Government of South Australia, 18 December 2012, accessed December 2016, http://archives.premier.sa.gov.au/images/news_releases/12_12Dec/energyprice.pdf.

¹⁰⁶ Essential Services Commission of South Australia, *Energy Retail Offers Comparison Report 2015–16*, August 2016.

¹⁰⁷ Department of Industry, Resources and Energy, FAQs about electricity price deregulation, New South Wales Government, accessed December 2016, http://www.resourcesandenergy.nsw.gov.au/energy-consumers/energy-sources/electricity/removal-of-electricity-price-regulation-faqs#_why-did-the_n_s_w_government-remove-retail-electricity-price-regulation__003f.

¹⁰⁸ Independent Pricing and Regulatory Tribunal, *Review of the performance and competitiveness of the retail electricity market in NSW from 1 July 2015 to 30 June 2016*, final report, November 2016.

Observed price differentials in south east Queensland

Since 1 July 2016, retail electricity prices have been deregulated in south east Queensland and retailers are setting their own standing offer prices. However, during the first year of deregulation, retailers are not allowed to vary these prices once they have been set, unless the variation is to reduce prices.¹⁰⁹

To inform our view on the expected price differential between lowest-priced offers and standing offers that might emerge in south east Queensland during 2017–18, we analysed the standing offers and market offers available in south east Queensland using the AER's Energy Made Easy online price comparison tool. The price differential for each retailer was calculated as the difference between an annual bill of a customer with an average usage profile, on a residential or small business flat rate tariff (i.e. tariffs 11 or 20 equivalent), under the retailer's standing offer and its lowest-priced offer. The lowest-priced offers of retailers generally are market offers but can be standing offers. This is broadly consistent with the approach considered during the 2016–17 price determination.

Based on that analysis, residential market offers of most retailers operating in south east Queensland were lower than their corresponding standing offers with the price differential ranging from zero to 25.7 per cent, with an average¹¹⁰ of 6.6 per cent (see Figure 11).

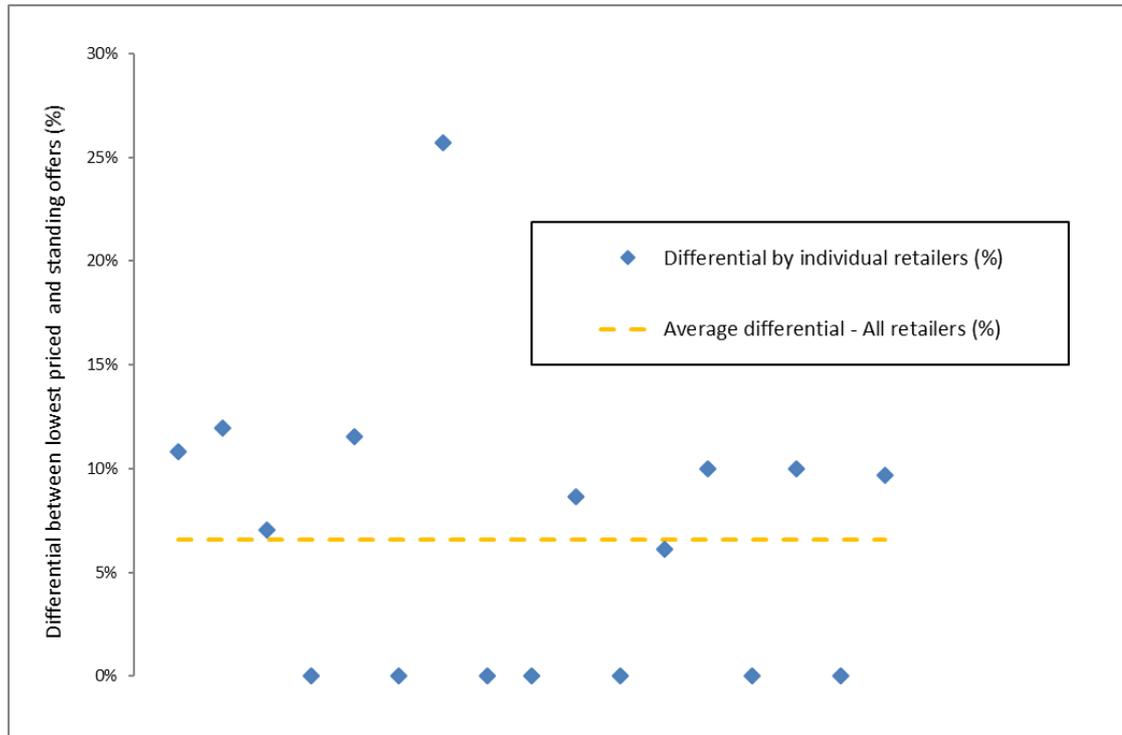
We observed that some retailers are pursuing a pricing strategy of providing only one electricity offer in a particular market segment. Retailers that choose to pursue this strategy in the small customer market must offer a standing offer, as they are required¹¹¹ to provide this type of offer as the default offer. A zero price differential is generally the result of some retailers adopting this strategy, where their standing offers are their lowest-priced offers.

¹⁰⁹ National Energy Retail Law (NERL), section 23, as per section 16 of the schedule to the Queensland NERL Act.

¹¹⁰ The average price differential (in percentage terms) is the simple average across the data points pertaining to annual bill difference (in percentage terms) between the lowest-priced offer and standing offer of individual retailers operating in south east Queensland.

¹¹¹ NERL (SA) Act 2011, Part 2, Division 3, section 22.

Figure 11 Differential between lowest-priced offers and standing offers in south east Queensland—residential flat rate tariffs



Note:

QCA analysis of data from www.EnergyMadeEasy.com relating to offers available as at 15 March 2017.

As at 31 May 2016, 99.96 per cent of residential customers are on flat rate tariffs in south east Queensland, therefore we consider that the price differentials of flat rate tariffs should be robust enough as a proxy for the overall differential for the residential customer segment.

This analysis assumes an annual consumption of 4710 kWh (which is the 2015–16 average annual consumption of a residential customer on a flat tariff in south east Queensland as advised by Energex).

Standing and market offers considered in this analysis do not incorporate features offered by retailers which incur an additional charge such as GreenPower.

Market offers are calculated as the annual net amount payable, taking into account quantifiable one-off sign-up bonuses, conditional and non-conditional discounts, as well as any account establishment fees that might offset some of the headline discount offered.

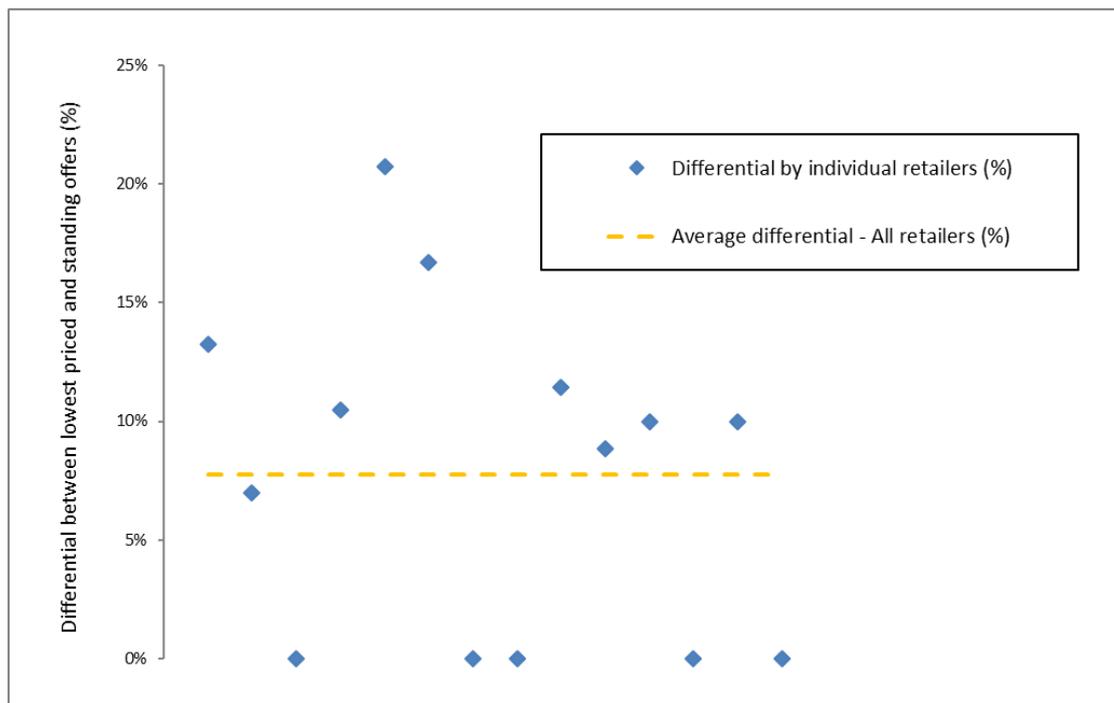
The average price differential (in percentage terms) is the simple average across the data points pertaining to the annual bill difference (in percentage terms) between the lowest-priced offer and standing offer of individual retailers operating in south east Queensland.

We have asked the AER to review Diamond Energy's retail offers for compliance. Diamond Energy's offers have not been included, pending the AER's review.

The QCA also undertook a similar analysis of flat rate tariff offers available to small business customers in south east Queensland. That analysis revealed that the price differential ranged from zero to 20.7 per cent, with an average of 7.7 per cent (See Figure 12).

Similar to the residential market, we also observed that some retailers pursued a pricing strategy of offering only standing offers but not market offers in the small business customer market, which means that their standing offers are their lowest-priced offers, resulting in zero price differentials.

Figure 12 Differential between lowest-priced offers and standing offers in south east Queensland—small business flat rate tariffs



Note:

QCA analysis of data from www.EnergyMadeEasy.com relating to offers available as at 15 March 2017.

As at 31 May 2016, 88.94 per cent of small business customers are on flat rate tariffs, therefore we consider that the price differentials of flat rate tariffs should be robust enough as a proxy for the overall differential for the small business customer segment.

This analysis assumes an annual consumption of 14400 kWh (which is the 2015–16 average annual consumption of a small business customer on a flat tariff in south east Queensland as advised by Energex).

Standing and market offers considered in this analysis do not incorporate features offered by retailers which incur an additional charge such as GreenPower.

Market offers are calculated as the annual net amount payable, taking into account quantifiable one-off sign-up bonuses, conditional and non-conditional discounts, as well as any account establishment fees that might offset some of the headline discount offered.

The average price differential (in percentage terms) is the simple average across the data points pertaining to the annual bill difference (in percentage terms) between the lowest-priced offer and standing offer of individual retailers operating in south east Queensland.

We have asked the AER to review Diamond Energy's retail offers for compliance. Diamond Energy's offers have not been included, pending the AER's review.

Considerations

Evidence from other jurisdictions shows that the price differential following retail price deregulation is mixed, likely due to the differences in maturity of these markets and temporary regulatory restrictions imposed during the initial stages of deregulation.

In its submission received under the November 2016 delegation, QCOSS considered that:

There are other factors that have affected the experience in other jurisdictions that are not necessarily applicable with Queensland.¹¹²

The Queensland Consumers Association also supported QCOSS's stance.

¹¹² Queensland Council of Social Service, Submission on the QCA interim consultation paper, *Regulated electricity prices for 2017–18*, 7 December 2016.

We agree with QCOSS and the Queensland Consumer Association. Given the differences between retail markets in south east Queensland and other jurisdictions, we consider that the size of the pricing differential observed is unlikely to be indicative of the expected differentials in the south east Queensland market in 2017–18. However, the experience in these jurisdictions demonstrates consistently that there is a price differential, with market offers generally priced at a discount to standing offers.

The analysis of the observed price differentials in south east Queensland also demonstrates that there is a differential, with market offers generally priced at a discount to standing offers. However, this analysis is not without its limitations. In addition to the obvious limitation where the underlying cost of supplying electricity is likely to change between 2016–17 and 2017–18, there are other notable constraints, including the limited maturity of the newly deregulated retail electricity market in south east Queensland and restrictions on setting standing offers imposed during the initial stages of deregulation.

At the time of the analysis, the retail market in south east Queensland had been deregulated for less than nine months. It is expected that the market dynamics will evolve over time as the south east Queensland market becomes more mature, potentially with more new retailers entering the market and more innovative/competitive products being offered by retailers. As observed by the AEMC, when a retail market is newly deregulated, new retailers will enter to compete with the incumbents and competition tends to be price-based. As a market matures, retailers are more likely to compete by innovating and differentiating their services rather than competing through prices, reducing the degree of price-based competition.¹¹³ As a result, the observed market offer prices may be short-lived as the market evolves and therefore unlikely to be indicative of the expected market offer prices in 2017–18.

As discussed, during the first year of deregulation, retailers are not allowed to vary standing offer prices once they have been set, unless the variation is to reduce prices. This restriction will be removed in 2017–18. We consider that the removal of this restriction could potentially affect how retailers set standing offer prices and consequently the expected differentials in 2017–18.

Given the limitations and reasoning identified above, we consider that the magnitude of the observed price differential in south east Queensland based on a sample of a market deregulated for less than nine months (of 2016–17) is unlikely to be indicative of the expected price differential in 2017–18. Therefore, we do not consider it appropriate to use the observed price differential from this analysis as a direct proxy for the expected price differential in 2017–18. To obtain a robust estimate of the expected price differential in future determinations, we will need pricing data covering a longer period with price deregulation in effect in the south east Queensland market.

QCA position

The experience in other deregulated jurisdictions and observed price differentials in the newly deregulated south east Queensland retail market demonstrate that a price differential exists with market offers generally priced at a discount to standing offers. However, as noted above, these analyses are not sufficiently reliable or robust to predict the magnitude of the expected price differential in 2017–18.

In this context, we consider it reasonable and prudent to leave the standing offer adjustment at the level determined for the 2016–17 price determination. In future price determinations, we will continue to monitor market developments in the south east Queensland retail electricity

¹¹³ AEMC, *2016 Retail Competition Review*, 30 June 2016.

market and other deregulated retail markets in the NEM to inform our view on the expected price differential that might emerge in south east Queensland.

In its submission received under the November 2016 delegation, QCOSS suggested that:

we are now seeing divergence in the different tariff components in Queensland between market offers and standing offers. In many cases, the market offers show relatively higher fixed charges and lower unit charges as compared to standing offers. This suggests that the standing offer differential should no longer be a single percentage figure ... It may be that the expected prices for small customers on standing offers in SEQ can better be determined by applying different factors to different tariff components.¹¹⁴

The Queensland Consumers Association also supported QCOSS's position.

We consider that adopting QCOSS's suggestion to have separate differentials for the fixed and variable components of a tariff is likely to be inconsistent with the UTP. As discussed, to be consistent with the UTP, the QCA needs to set notified prices for small customers in regional Queensland that broadly reflect the expected overall level of standing offer prices in south east Queensland. To derive the overall level of standing offer prices, we need to consider the average annual bill of standing offers, not the average amount payable under fixed or variable components of a tariff as QCOSS suggested.

To set notified prices for small customers in regional Queensland that broadly reflect the expected level of standing offer prices in south east Queensland, our decision is to continue to add a standing offer adjustment above the efficient costs of supply in south east Queensland and to maintain this adjustment at five per cent of total estimated efficient costs.

6.2 Headroom for large and very large business customer tariffs

Where it is effective, competition generally provides the best means of delivering the goods and services that customers demand at prices that reflect efficient costs.

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.

In retail markets where competition is considered feasible, the AEMC recommends that some form of 'headroom' allowance be included as part of regulated retail prices to facilitate competition.¹¹⁵ The headroom allowance is an amount, in addition to the estimated efficient cost of providing customer retail services, included in regulated prices for the purpose of encouraging customers to engage in the market and seek out more attractive market offers.

¹¹⁴ Queensland Council of Social Service, Submission on the QCA interim consultation paper, *Regulated electricity prices for 2017–18*, 7 December 2016.

Queensland Council of Social Service, Submission on the QCA draft determination, *Regulated electricity prices for 2017–18*, 3 April 2017.

¹¹⁵ AEMC, *Advice on best practice retail price methodology*, final report, 27 September 2013.

While there is very limited competition in the small customer segment of the retail electricity market in regional Queensland, the large customer segment¹¹⁶ has developed a degree of effective competition, particularly in areas where notified prices more closely reflect the actual costs of supply (i.e. Ergon Distribution east pricing zone, transmission region one).

Retail competition in this market segment can be supported through the inclusion of an appropriate level of headroom as part of notified prices with the aim of encouraging customers to seek out better market offers. Since the 2012–13 price determination, we have included a headroom allowance of five per cent of total estimated efficient costs to facilitate and encourage competition in the large customer market segment in regional Queensland.

6.2.1 How much headroom allowance should be included?

It is difficult to assess the impact of more cost-reflective notified prices and the inclusion of headroom in facilitating retail competition. In the large customer market segment in regional Queensland, where notified prices more closely reflect the actual costs of supply in some areas but are well below-cost in other areas, there has been a small increase in the proportion of large and very large customers on market contracts in recent years.

However, in the Ergon Distribution east pricing zone, transmission region one (where notified prices most closely reflect the actual cost of supply), the proportion of both large¹¹⁷ and very large¹¹⁸ customers on market contracts is much higher and has been increasing. In 2012–13, around 73 per cent of very large customers in this area were on market contracts; this figure has increased to 76 per cent as of June 2016. Moreover, more than 50 per cent of large customers in this area were on market contracts as of June 2016.

Despite these developments, some barriers to the development of widespread competition in the large customer market segment remain:

- Setting uniform retail tariffs means that customers in higher-cost areas of regional Queensland are not paying cost-reflective notified prices and some very large customers (specifically Individually Calculated Customers) are paying notified prices based on network charges of Connection Asset Customers, rather than cost-reflective network charges.
- A number of large and very large customers in regional Queensland are still accessing obsolete and transitional tariffs, which are generally not cost-reflective.
- Once large or very large customers accept a market contract, they are not allowed to return to Ergon Retail, which may discourage them from accepting a market offer.¹¹⁹

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

¹¹⁶ The large customer market segment consists of Standard Asset Customers (SAC) (Large), Connection Asset Customers (CAC) and Individually Calculated Customers (ICC).

¹¹⁷ Large customers are Standard Asset Customers (SAC) (Large), typically consuming more than 100 MWh but less than 4 GWh per annum.

¹¹⁸ Very large customers consist of Connection Asset Customers (CAC), typically consuming more than 4 GWh but less than 40 GWh per annum and Individually Calculated Customers (ICC), typically consuming more than 40 GWh per annum.

¹¹⁹ This restriction also applies to any future occupants of the premises (e.g. if the premises is sold or occupied by a new tenant).

extent possible) and to encourage customers to engage in the market and actively seek out better offers.

Submissions under the November 2016 delegation

The Australian Sugar Milling Council (ASMC)¹²⁰ and Cotton Australia¹²¹ did not support the inclusion of an allowance for headroom in notified prices. Canegrowers Isis considered that headroom is 'a theoretical consideration', which 'should be calculated and monitored for performance and asset assessment purposes but not applied as a cost component'.¹²² However, none of these stakeholders have provided evidence to suggest that headroom is ineffective in facilitating competition in the large customer market segment in regional Queensland, especially in areas where notified prices most closely reflect the actual cost of supply (i.e. Ergon Distribution east pricing zone, transmission region one).

Energy Queensland supported the inclusion of an allowance for headroom in notified prices for large and very large business customers.¹²³

QCA position

We consider it reasonable to conclude that the previous approach of including a headroom allowance for large and very large business customers at five per cent of total costs has facilitated the development and maintenance of competition in the large customer market segment in regional Queensland, especially in areas where notified prices most closely reflect the actual cost of supply.

In the absence of any further information or compelling reasons to change the level of headroom, our 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 estimated efficient costs.

6.3 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 of supply. Cost pass-through mechanisms are usually restricted to costs associated with events that are outside the control of the regulated entity.

For the 2014–15 price determination, we applied a cost pass-through mechanism for the first time to pass through an under-recovery of costs in 2013–14 associated with the SRES.¹²⁴ The SRES costs incurred by retailers are determined by the final small-scale technology percentages (STPs) set by the Australian Clean Energy Regulator (CER).

We continued with this approach for the 2015–16 and 2016–17 price determinations. For the 2016–17 price determination, we applied a negative pass-through of a small over-recovery of SRES costs incurred during 2015–16 into 2016–17 notified prices.

¹²⁰ Australian Sugar Milling Council, Submission on the QCA interim consultation paper, *Regulated electricity prices for 2017–18*, 7 December 2016.

¹²¹ Cotton Australia, Submission on the QCA draft determination, *Regulated electricity prices for 2017–18*, April 2017.

¹²² Canegrowers Isis, Submission on the QCA interim consultation paper, *Regulated electricity prices for 2017–18*, 7 December 2016.

¹²³ Energy Queensland, Submission on the QCA interim consultation paper, *Regulated electricity prices for 2017–18*, 7 December 2016.

¹²⁴ See Chapter 4 for details on how SRES costs are estimated.

We also previously proposed that the cost pass-through 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, a pass-through for network charges has not been needed to date.

In previous price determinations, we considered that not allowing a 'true-up' of costs resulting from particular events that are outside retailers' control may result in notified prices being out of alignment with the estimated benchmark costs of supply¹²⁵, which could deviate from the intent of the UTP.

6.3.1 Pass-through of SRES costs incurred in 2016–17

As discussed in section 4.2.1, the STP determines the number of small-scale technology certificates (STCs) a retailer must surrender to discharge its SRES liabilities.

Retailers incur SRES liabilities for each calendar year, but notified prices are determined for each financial year. While the final STP for the first and second quarters of the prospective financial year is known when setting notified prices, the final STP for the third and fourth quarter is not. To overcome this, ACIL estimates the SRES costs using the average of the final STP (for the first two quarters of the financial year) and the preliminary or 'non-binding' STP¹²⁶ (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 in notified prices may under- or over-compensate retailers for their actual SRES liabilities.

Based on the final STP for 2017, retailers have over-recovered the costs of complying with the SRES in 2016–17. This is because the final STP for the second half of 2016–17 is 7.01 per cent, which is lower than the non-binding STP of 9.02 per cent used for setting the SRES component of notified prices in 2016–17.

Returning these over-recovered SRES costs to customers reduces the usage charge by approximately 0.0539 c/kWh for residential tariffs and by 0.0546 c/kWh for small business tariffs. The calculation of SRES cost pass-through amount is set out in more detail in Appendix K. The table below presents our assessment of the 2016–17 over-recovered amounts.

Table 12 SRES over-recoveries in 2016–17

<i>Settlement class</i>	<i>Retail tariff</i>	<i>SRES over-recovery</i>
		<i>c/kWh</i>
Energex NSLP–residential and controlled loads	11, 12A, 14, 31, 33	0.0539
Energex NSLP–small business and unmetered supply	20, 22A, 24, 41, 91	0.0546
Ergon Energy NSLP–small, medium, large (SAC) demand and streetlights	44, 45, 46, 50, 71	0.0540

Note: SRES over-recovery includes allowances for energy losses, variable retail costs, standing offer adjustment/headroom and time value for money. SRES pass-through is not applicable to retail tariffs 47 and 48, given that these tariffs are classified as obsolete and are not determined using the N+R approach like other standard tariffs.

¹²⁵ In the 2016–17 price determination, notified prices for residential and small business customers were based on the costs of supply in south east Queensland and notified prices for large and very large business customers were based on the costs of supply in Ergon Distribution east pricing zone, transmission region one.

¹²⁶ The CER publishes non-binding STPs to provide a guide for future final STPs.

QCA position

Our decision is to require a negative pass-through of a small over-recovery of 2016–17 SRES costs into 2017–18 notified prices, as set out in the table above.

Although these are relatively small amounts, we consider that 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 the costs of supply in south east Queensland, which is consistent with the intent of the UTP. This approach is largely consistent with the approach adopted in the 2016–17 price determination.

As stated above, we have previously considered that the cost pass-through mechanism could be used to account for material differences in network charges. However, as the final 2016–17 network charges billed to retailers did not differ from those used to set 2016–17 notified prices, no adjustment is required.

In its submission received under the November 2016 delegation, Energy Queensland noted that:

the mechanism for estimating energy costs has undervalued both the wholesale price of energy as well as Renewable Energy Certificates. Energy Queensland would support a review of actual versus forecast prices for the 2015–16 period so that the shortfall can be recognised in the 2017–18 prices.¹²⁷

As discussed, we consider that cost pass-through mechanisms should only be restricted to under- or over-recovery of costs attributed to events that are outside the control of the regulated entity such as SRES costs and network charges.

Depending on the regulatory framework that will apply to future price determinations and on 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, we cannot commit to the continued availability of a cost pass-through mechanism beyond this price determination.

¹²⁷ Energy Queensland, Submission on the QCA interim consultation paper, *Regulated electricity prices for 2017–18*, 7 December 2016.

7 TRANSITIONAL ARRANGEMENTS

The May 2017 delegation requires that the QCA consider maintaining transitional arrangements for tariffs classed as transitional or obsolete, which include farming and irrigation tariffs.

The QCA will:

- *maintain transitional arrangements for tariffs 20 (large), 21, 22 (small and large), 37, 62, 65 and 66, and introduce transitional arrangements for tariffs 47 and 48*
- *maintain the transitional periods established in the 2013–14 final determination for tariffs 20 (large), 21, 22 (small and large), 37, 62, 65 and 66 and introduce a five-year transitional period for tariffs 47 and 48*
- *allow all customers access to transitional tariffs 20 (large), 21, 22 (small and large), 62, 65, and 66 and close tariffs 47 and 48 to new customers¹²⁸*
- *adjust transitional and obsolete tariffs, including tariffs 47 and 48, in line with changes in standard business tariffs, and apply escalation factors to limit charges for transitional and obsolete tariffs falling further below cost in dollar terms.*

7.1 Transitional arrangements for transitional and obsolete tariffs

Existing transitional and obsolete tariffs

Some business customers, including farmers and irrigators, are currently supplied under transitional or obsolete tariffs. These are legacy retail tariffs for which there is no corresponding network tariff, and which as a result cannot be determined under an N+R approach.

In previous price determinations, the QCA decided that most of these existing transitional and obsolete tariffs (tariffs 20 (large), 21, 22 (small and large), 37, 62, 65 and 66) should continue to be available for a transitional period because some customers would face significant financial impacts if they were moved to a standard business tariff.

The May 2017 delegation requires that we consider maintaining these transitional arrangements and continuing to allow all customers access to transitional tariffs.

QCA position

The QCA will maintain transitional arrangements for existing transitional and obsolete tariffs.

Data from Ergon Retail¹²⁹ (see Appendix F) shows that while a significant number of customers would be better off on standard business tariffs, some customers on existing transitional and obsolete tariffs are paying electricity bills significantly below standard business tariffs and below the cost of supplying them with electricity. We consider it appropriate to maintain transitional arrangements, as some customers would face significant price impacts if they were immediately moved to the standard business tariffs, which all other businesses in regional Queensland must pay.

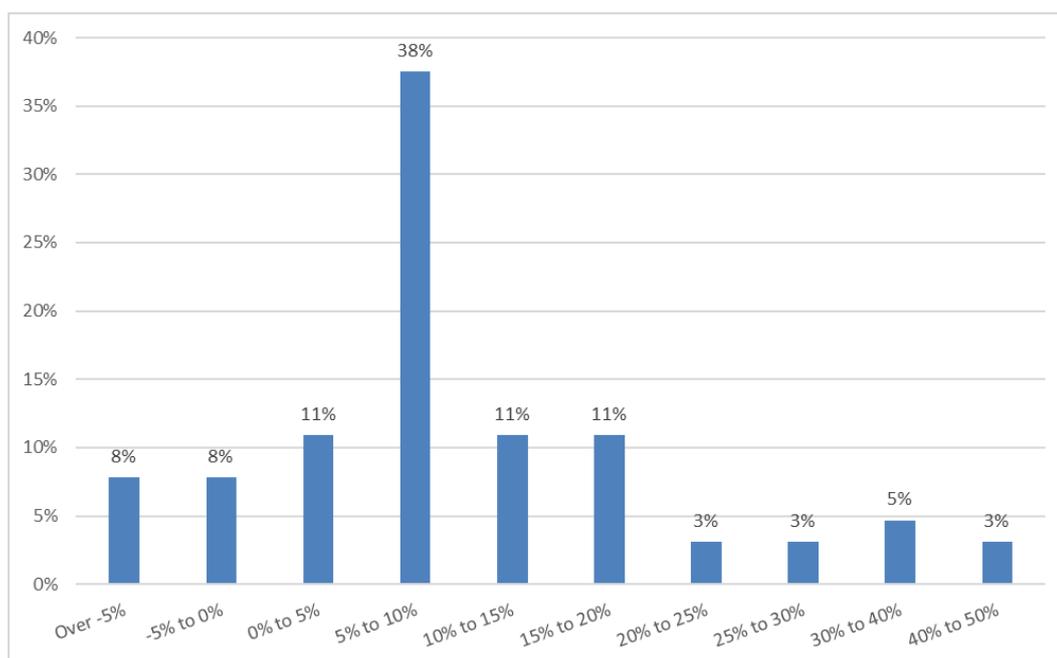
¹²⁸ Tariff 37 was made obsolete in 2007 and is not accessible to new customers.

¹²⁹ Analysis related to tariffs 20 (large), 21, 22 (small and large), 37, 62, 65 and 66 are based on data provided by Ergon Retail for the 2016–17 final determination. More recent data was not available due to the work program and data migration required to implement Ergon Retail's new billing system.

Transitional arrangements for customers on tariffs 47 and 48

As discussed in Chapter 3, from 1 July 2017 Ergon Distribution will discontinue its network tariff EDHTT1 which the QCA used as the basis for retail tariffs 47 and 48. Customers currently on these tariffs would likely be required to move to one of the new retail tariffs based on CAC network tariffs,¹³⁰ or an alternative large customer tariff, and would face substantially different tariff structures to tariffs 47 and 48. Ergon Retail analysis (see Figure 13 below) shows that while bill impacts for these customers are smaller in percentage terms than for customers on existing transitional and obsolete tariffs, 14 per cent of customers would experience bill increases of 20 per cent or more by moving to the new retail tariffs.

Figure 13 Estimated bill impact for customers moving from tariffs 47 and 48 to the new high voltage tariffs



Submissions received under the November 2016 delegation

Auctus Resources and the Australian Sugar Milling Council supported the introduction of transitional arrangements for tariff 48, highlighting the potential for price shocks to their businesses. Energy Queensland supported the QCA maintaining its approach to existing transitional and obsolete tariffs in order to provide certainty and confidence in the process, allowing customers to make appropriate investment decisions. Energy Queensland recognised there may be a case for introducing transitional arrangements for tariffs 47 and 48.

QCA position

The QCA will introduce transitional arrangements for tariffs 47 and 48.

The latest modelling from Ergon Retail shows customers on tariffs 47 and 48 face comparatively smaller percentage bill increases, with the majority of customers facing bill impacts of 10 per cent or less, and the largest bill impact is less than 50 per cent. In addition, we understand that some customers may be able to reduce these impacts by renegotiating their authorised demand levels, or making changes to their business operations. However, given the size of the operations of some of these customers, and the substantial amounts of electricity they

¹³⁰ Tariffs 51A-D, 52A-C and 53. See Chapter 3 for more information on these new tariffs.

consume, we are inclined to take a conservative approach and introduce transitional arrangements to allow customers and their retailers time to adjust their electricity supply contracts and/or operations to suit the new tariffs. We note that a number of customers would be better off on the new retail tariffs and encourage customers currently on tariffs 47 and 48 to talk to their retailer about these new tariffs and how best to prepare for the transition.

7.1.1 Transitional periods

Existing transitional and obsolete tariffs

In previous price determinations, the QCA determined that transitional and obsolete tariffs should be maintained for a transitional period to allow time 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 transitional and obsolete tariffs. In the 2013–14 price determination we determined that tariffs 20 (large), 21, 22 (small and large), 37, 62, 65 and 66 would be made available until 2020.

Submissions under the November 2016 delegation

Canegrowers Isis supported retaining transitional tariffs until such time that an alternative set of tariffs, based on economic viability and capacity to pay, have been introduced. The Queensland Farmers' Federation (QFF) supported extending the transitional period. Cotton Australia recommended that transitional tariffs be 'grandfathered', remaining available to current users while the property stays in the same name and there is no increase in service capacity to the property. Energy Queensland supported maintaining our previous approach to transitional tariffs in order to provide certainty and confidence in the process, allowing customers to make appropriate investment decisions.

QCA position

The QCA will maintain the existing transitional periods established in our 2013–14 final determination for existing transitional and obsolete tariffs.

We agree with Energy Queensland that maintaining our approach to existing¹³¹ transitional and obsolete tariffs will help promote certainty for customers and allow them to make appropriate investment decisions to prepare for moving to standard business tariffs. We have considered suggestions that transitional periods be extended, or that transitional and obsolete tariffs be 'grandfathered' (made available to existing customers in perpetuity). The QCA remains of the view that the current transitional periods are appropriate. Grandfathering, or making these tariffs available effectively in perpetuity, would benefit those businesses who retained access to them.¹³² However, allowing access to tariffs which are below standard business tariffs would not promote efficient, economical and environmentally sound use of electricity. As such, grandfathering of transitional and obsolete tariffs would not be consistent with the objectives of the Electricity Act.

In addition to the QCA's considerations, the length of transitional periods has been considered by the Queensland Productivity Commission (QPC) in its electricity price inquiry, and the Queensland Government in response to the QPC enquiry. The government did not support

¹³¹ Tariffs 20 (large), 21, 22 (small and large), 37, 62, 65 and 66.

¹³² Grandfathering transitional and obsolete tariffs would effectively grant a perpetual cost advantage, in the form of additional subsidies under the UTP, to existing businesses over potential new entrants to their industry. While not the basis for determining transitional arrangements, we note this would negatively impact on competition in these industries and the cost to taxpayers of the UTP.

extending any transitional period,¹³³ and has announced a \$10 million regional business customer support package to assist regional businesses on transitional and obsolete tariffs, including farmers and irrigators, to understand their electricity use, minimise their electricity costs and make informed choices about future tariff options.¹³⁴

Transitional tariffs 47 and 48

Having introduced transitional arrangements for tariffs 47 and 48, the QCA must now determine an appropriate transitional period. Given the diversity of customers on these tariffs, it is not possible to determine transitional periods based on the life of infrastructure so we must consider bill impacts in making our decision. In its 2013–14 price determination the QCA established two different periods for transitional and obsolete tariffs, based on the potential bill impact on customers of moving to standard business tariffs. These were:

- a seven-year transitional period was established for tariffs 20 (large), 21, 22 (small and large), 37, 62, 65 and 66, as a number of customers would have experienced bill increases of 100 per cent or more
- a shorter two-year transition period for tariffs 41(large), and 43 as the majority of customers would have experienced bill increases of 10 per cent or less, and only three customers would have experienced bill increases of 50 per cent or more.

Modelling from Ergon Retail (see Figure 13 above) shows the bill impacts for customers on tariffs 47 and 48 are of a similar magnitude, in percentage terms, to those customers faced in 2013–14 on tariffs 41(large) and 43. In its submission received under the November 2016 delegation, Energy Queensland supported a three-year transition period to align the end date of all transitional and obsolete tariffs to avoid confusion and potential equity issues.

QCA position

Given the types of customers on these tariffs, and the size of their operations and electricity consumption, the QCA is inclined to take a conservative approach and implement a five-year transition period. While a two-year transitional period would be consistent with our earlier decision on tariffs 41(large) and 43, customers on tariffs 47 and 48 consume a substantial amount of electricity, which means that the similar bill impacts in percentage terms may translate into a more significant bill impact in dollar terms.

While a three-year transitional period, as suggested by Energy Queensland, would align the expiry date of all transitional and obsolete tariffs, our decision must be based on the potential bill impacts for customers on tariffs 47 and 48. We consider a five-year transitional period is necessary to provide sufficient time for customers to adapt their electricity supply contracts, and their operations, to the new tariff structures.

7.1.2 Access to transitional tariffs

The May 2017 delegation requires that the QCA consider continuing to allow all customers access to transitional tariffs.

In the 2013–14 price determination, the QCA decided that all business customers should have access to tariffs 20 (large), 21, 22 (small and large), 62, 65, and 66¹³⁵ throughout the transitional

¹³³ Queensland Government, *Queensland Government response to the Queensland Productivity Commission Electricity Pricing Inquiry*, November 2016, p. 11.

¹³⁴ See https://www.dews.qld.gov.au/__data/assets/pdf_file/0018/940032/regional-business.pdf.

¹³⁵ Tariff 37 cannot be accessed by new customers as it was classified as obsolete on 1 July 2007.

period, subject to individual tariff terms and conditions. We made this decision so that all businesses are 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. In the 2016–17 price determination, we found no significant increase in customers accessing these tariffs and we decided to continue to allow open access.

Submissions received under the November 2016 delegation

The ASMC did not support closing tariff 48 to new customers, as sugar mills were changing from transitional tariff 22 to tariff 48 in the non-crushing season enabling them to save up to 57 per cent on their electricity costs.¹³⁶ The ASMC stated that this was 'in Ergon's best interests'¹³⁷ and that tariff 48 should remain open to new customers as this strategy 'enhances the efficiency of the network'.¹³⁸

Energy Queensland supported the QCA maintaining its approach to transitional tariffs in order to provide certainty and confidence in the process, allowing customers to make appropriate investment decisions. Energy Queensland also supported closing access to tariffs 47 and 48 to new customers.

QCA position

The QCA will:

- classify tariffs 47 and 48 as obsolete, closing them to new customers while allowing existing customers to access them¹³⁹, and
- continue to allow all business customers to have access to transitional tariffs 20 (large), 21, 22 (small and large), 62, 65, and 66.

The QCA considers classifying tariffs 47 and 48 as obsolete, which means closing them to new customers while allowing existing customers to access them, strikes the right balance between:

- allowing existing businesses which have invested primarily based upon the price signals in these tariffs time to adjust their operations to the new tariffs, and
- encouraging new customers to make investments based on the new retail pricing signals.

Allowing new customers to access these tariffs may encourage long term investment and business decisions based on the legacy price signals in tariffs 47 and 48, which would make the final transition to standard business tariffs more difficult.

The QCA notes comments from the ASMC who was against closing tariff 48 to new customers on the basis that it would prevent its members from significantly reducing their electricity costs by switching between transitional tariff 22 and tariff 48. The ASMC argues the QCA should allow

¹³⁶ Australian Sugar Milling Council, Submission on the QCA interim consultation paper, *Regulated electricity prices for 2017–18*, 7 December 2016.

¹³⁷ Australian Sugar Milling Council, Submission on the QCA draft determination, *Regulated electricity prices for 2017–18*, 3 April 2017, p. 2.

¹³⁸ Australian Sugar Milling Council, Submission on the QCA draft determination, *Regulated electricity prices for 2017–18*, 3 April 2017, p. 3.

¹³⁹ Classifying tariffs 47 and 48 as obsolete means that existing customers would be able to remain on these tariffs during the transitional period. However, if an existing customer switched to a different retail tariff, they would not be able to switch back to tariffs 47 or 48.

this practice to continue because it 'enhances the efficiency of the network'.¹⁴⁰ However, a key reason the QCA has classified retail tariff 48 as obsolete is because the network tariff underpinning it has been superseded by new network tariffs developed as part of Ergon Distribution's future network tariff strategy. The QCA considers network efficiency would be best enhanced by large customers moving to standard business retail tariffs that incorporate current network tariffs and price signals.¹⁴¹

The decision to allow new customers to access transitional tariffs was not intended to enable customers on transitional tariffs to move even further away from standard business tariffs, effectively increasing their level of subsidy from taxpayers, nor was it to provide network price signals. The QCA allowed new customers to access transitional tariffs in the interests of equity for all businesses, but recognised that there could be an adverse impact on competition, and the level of government subsidy, if retailers ended up supplying too many customers below cost. In subsequent price determinations we considered data from Ergon Retail on the number of customers accessing transitional tariffs as part of our decision to continue allowing new customers to access these tariffs.

The latest data from Ergon Retail does not indicate a significant increase in the number of customers accessing existing transitional tariffs.¹⁴² While Canegrowers Isis suggested in its submission received under the November 2016 delegation that its members would benefit from increased flexibility in choosing different tariffs, it does not specifically state that these members are using access to transitional tariffs to increase their level of government subsidy.

Unfortunately, the timeframes for making this price determination do not allow for an investigation into whether customers on existing transitional tariffs are using access to transitional tariffs to increase their level of subsidy and move further away from the prices of standard business tariffs. For these reasons the QCA will maintain its approach of allowing new customers to access tariffs 20 (large), 21, 22 (small and large), 62, 65, and 66 in 2017–18. However, should we receive a delegation from the Minister to set 2018–19 notified prices, the QCA will investigate the prevalence of these practices and consider whether it remains appropriate to continue to allow new customers to access transitional tariffs.

7.1.3 Escalation of transitional and obsolete tariffs

Transitional and obsolete tariff charges are not determined using an N+R approach like other tariffs. In past price determinations the QCA's general approach to setting charges for each transitional and obsolete tariff was to adjust the charges based on the percentage change 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.¹⁴³ 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 the largest proportion of customer bills would likely be impacted by 10 per cent or less, an escalation factor of 1.1 was applied; where

¹⁴⁰ Australian Sugar Milling Council, Submission on the QCA draft determination, *Regulated electricity prices for 2017–18*, 3 April 2017, p. 3.

¹⁴¹ Tariffs 51A-D, 52A-C and 53. See Chapter 3 for more information on these new tariffs.

¹⁴² Tariffs 20 (large), 21, 22 (small and large), 37, 62, 65 and 66.

¹⁴³ As any given percentage increase in a higher (such as a standard business tariff) bill will be greater expressed 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 them would increase from \$1,000 to \$1,100.

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.¹⁴⁴

In the 2016–17 price determination the QCA applied an escalation factor of 1.1 for all transitional and obsolete tariffs to limit charges falling further below cost in dollar terms. Under our general approach in previous price determinations, the escalation factors for most of these tariffs would have been 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 were more than halfway through the transition to standard business tariffs, we decided to only apply the minimum escalation factor of 1.1.

Submissions under the November 2016 delegation

The ASMC did not support escalation of transitional tariffs as it considered the fundamental assumptions of Ergon Distribution network pricing model to be flawed. Canegrowers considered there was no justification for increasing irrigation tariffs at a faster rate than other electricity tariffs. Cotton Australia recommended that the QCA cease applying escalation factors. Energy Queensland supported applying appropriate escalation factors, noting that the customer impact burden to shift customers to cost-reflective tariffs increased every time a new customer accessed them and that an escalation factor was needed to make transitional tariffs less attractive.

QCA position

The QCA has adjusted transitional and obsolete tariffs in line with changes in standard business tariffs, and applied escalation factors to limit charges for transitional and obsolete tariffs falling further below cost in dollar terms. This is consistent with previous determinations.

The QCA will apply the following escalation factors in line with the gap between customer bills under transitional and obsolete tariffs and corresponding standard business tariffs:

- 1.1 where the largest proportion of customer bills would likely be impacted by 10 per cent or less
- 1.25 where the largest proportion of customer bills would likely be impacted by between 10 per cent and 100 per cent
- 1.5 where the largest proportion of customer bills would likely be impacted by more than 100 per cent.

Table 13 maps transitional and obsolete tariffs to small and large customer standard business tariffs, shows the percentage increase forecast for standard business tariffs in 2017–18. Consistent with the 2016–17 price determination, we have used the small business tariff 20 as the basis for escalating small customer transitional tariffs 21, 62, 65 and 66.

The latest data from Ergon Retail, received shortly before the final determination, shows a significant increase in the number of small customers being supplied under tariff 37. Ergon advised this likely as a result of an error in previous data being extracted from the billing system for the purposes of analysis. Due to the significant change in the data there is some uncertainty around which tariff is the correct benchmark for adjusting tariff 37. The QCA considers it prudent to investigate the issue further and consult with stakeholders before changing our

¹⁴⁴ In the 2015–16 price determination the QCA left transitional and obsolete tariffs unchanged, as standard business tariffs fell in price.

approach to adjusting tariff 37. Consistent with previous determinations, for 2017–18 notified prices we will continue to adjust tariff 37 based on large customer tariffs.

Table 13 Alignment of tariffs and underlying cost increases

<i>Transitional or obsolete tariff</i>	<i>Standard business tariff^a</i>	<i>Standard business tariff annual bill increase (%)^b</i>
Tariffs 21, 62, 65, 66	Tariff 20	4.1
Tariffs 20 (large), 22 (small and large), 37 ^c , 47 ^d	Tariffs 44–46	6.9 ^e
Tariff 48 ^d	Tariffs 51A–51D, 53	10.3 ^f

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

b The price increases for 2017–18 transitional/obsolete tariffs (Table 14) have been calculated using unrounded annual bill increase percentages.

c Tariff 37 is aligned with large customer tariffs for setting notified prices. Small customers on tariff 37 will most likely move to tariff 20 or 22A.

d Tariff 47 can only be accessed by large standard asset customers, so this tariff aligns with standard business tariffs accessible to these customers. Tariff 48 can only be accessed by large connection asset customers or individually calculated customers, so this tariff aligns with standard business tariffs 51A–51D and 53.

e This is the average of typical customer bill increases across tariffs 44, 45 and 46.

f This is the average of typical customer bill increases across tariffs 51A–51D and 53.

Table 14 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 F for further details) and the corresponding escalation factor for each transitional and obsolete tariff.

Table 14 Likely impact on electricity bills for customers on transitional and obsolete tariffs moving to equivalent 2016–17 standard business tariffs

<i>Transitional tariff</i>	<i>Standard business tariff</i>	<i>Percentage of customers who would experience less than 10% increase in bills (%)</i>	<i>Percentage of customers who would experience 10% to 100% increase in bills (%)</i>	<i>Percentage of customers who would experience greater than 100% increase in bills (%)</i>	<i>Escalation factor</i>
Tariff 20 (large)	Tariff 44 to 46 ^a	75.9	9.4	14.7	1.1
Tariff 21	Tariff 20	10.8	66.1	23.1	1.25
Tariff 22 (small and large)	Tariff 44 to 46 ^a	70.7	15.6	0.0	1.1
Tariff 37 ^b	Tariff 44 to 46 ^a	44.5	38.7	16.8	1.1
Tariff 47	Tariff 44 to 46 ^a	64.1	35.9	0.0	1.1
Tariff 48	Tariffs 51A–D, 53 ^a	64.1	35.9	0.0	1.1
Tariff 62	Tariff 20	40.3	59.4	0.5	1.25
Tariff 65	Tariff 20	53.9	45.8	0.3	1.1
Tariff 66	Tariff 20	60.1	39.3	0.6	1.1

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

b The escalation factor for tariff 37 has been calculated based on the bill impacts for large customers, as discussed above.

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.

7.2 Conclusion on transitional arrangements

Table 15 outlines our decision on transitional arrangements for 2017–18.

Table 15 Transitional arrangements for 2017–18

<i>Obsolete or transitional tariff</i>	<i>Period to be retained</i>	<i>2017–18 price increase (%)^a</i>
Tariff 20 (large) –transitional	3 years	7.6
Tariff 21–transitional	3 years	5.1
Tariff 22 (small and large) –transitional	3 years	7.6
Tariff 37–obsolete	3 years	7.6
Tariff 47–obsolete	5 years	7.6
Tariff 48–obsolete	5 years	11.3
Tariff 62–transitional	3 years	5.1
Tariff 65–transitional	3 years	4.5
Tariff 66–transitional	3 years	4.5

a. The 2017–18 price increase percentages are rounded numbers. We used these rounded price increases in deriving the 2017–18 transitional/obsolete tariffs.

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 2017–18 network tariffs and charges submitted to the AER by Energex and Ergon Energy. 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 allowances, 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 to be published in a tariff schedule, which includes other information, including the eligibility criteria and terms and conditions for each tariff. A copy of this is provided in Appendix G.

8.1 Notified prices

The following tables set out our final determination of regulated retail tariffs and prices for 2017–18. All tariffs are presented exclusive of goods and services tax (GST).

Table 16 Regulated retail tariffs and prices for residential customers (excl. GST), 2017–18

<i>Retail tariff</i>	<i>Fixed charge^a</i>	<i>Usage charge (peak)</i>	<i>Usage charge (flat/off-peak)</i>	<i>Demand charge (peak)</i>	<i>Demand charge (off-peak)</i>
	<i>c/day</i>	<i>c/kWh</i>	<i>c/kWh</i>	<i>\$/kW/mth</i>	<i>\$/kW/mth</i>
Tariff 11—Residential (flat rate)	87.133		25.890		
Tariff 12A—Residential (time-of-use) ^b	89.848	61.137	21.070		
Tariff 14—Residential (time-of-use demand) ^c	45.749		17.430	65.818	9.931
Tariff 31—Night rate (super economy)			15.776		
Tariff 33—Controlled supply (economy)			20.482		

a. *Charged per metering point.*

b. *Peak—3 pm to 9.30 pm (December, January and February); off peak—all other times.*

c. *Peak demand—3 pm to 9:30 pm (December, January and February); off peak demand—3 pm to 9.30 pm (March to November).*

Table 17 Regulated retail tariffs and prices for small business and unmetered supply customers, other than street lighting (excl. GST), 2017–18

<i>Retail tariff</i>	<i>Fixed charge^a</i>	<i>Usage charge (peak)</i>	<i>Usage charge (flat/off-peak)</i>	<i>Demand charge (peak)</i>	<i>Demand charge (off-peak/flat)</i>
	<i>c/day</i>	<i>c/kWh</i>	<i>c/kWh</i>	<i>\$/kW/mth</i>	<i>\$/kW/mth</i>
Tariff 20—Business (flat rate)	120.499		27.718		
Tariff 22A—Business (time-of-use) ^b	120.499	57.195	23.871		
Tariff 24—Business (time-of-use demand) ^c	63.289		18.871	101.553	10.721
Tariff 41—Low voltage (demand)	519.079		16.144		26.211
Tariff 91—Unmetered			25.147		

a. Charged per metering point.

b. Peak—10 am to 8 pm on weekdays (December, January and February); off-peak—all other times.

c. Peak demand—10 am to 8 pm on weekdays (December, January and February); off peak demand—10 am to 8 pm on weekdays (March to November).

Table 18 Regulated retail tariffs and prices for large business and street lighting customers (excl. GST), 2017–18

<i>Retail tariff</i>	<i>Fixed charge</i>	<i>Usage charge (peak)</i>	<i>Usage charge (flat/off-peak)</i>	<i>Demand charge (peak)</i>	<i>Demand charge (off-peak/flat)</i>
	<i>c/day</i>	<i>c/kWh</i>	<i>c/kWh</i>	<i>\$/kW/mth</i>	<i>\$/kW/mth</i>
Tariff 44—Over 100 MWh small (demand)	4966.937		14.791		37.763
Tariff 45—Over 100 MWh medium (demand)	16166.008		14.791		28.451
Tariff 46—Over 100 MWh large (demand)	42193.294		14.769		23.288
Tariff 50—Over 100 MWh seasonal time-of-use (demand) ^a	4060.474	14.346	17.129	63.640	11.597
Tariff 71—Street lighting ^b	0.525		32.025		

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

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

Table 19 Regulated retail tariffs and prices for very large business customers (excl. GST), 2017–18

<i>Retail tariff</i>	<i>Fixed charge</i>	<i>Usage charge (peak)</i>	<i>Usage charge (flat/off-peak)</i>	<i>Connection Unit</i>	<i>Capacity (flat/off-peak)</i>	<i>Demand charge (flat/peak)</i>	<i>Excess Reactive Power charge</i>
	<i>c/day</i>	<i>c/kWh</i>	<i>c/kWh</i>	<i>\$/day/unit</i>	<i>\$/kVA of AD/mth</i>	<i>\$/kVA/mth</i>	<i>\$/excess kVA/mth</i>
Tariff 51A—over 4 GWh high voltage (CAC 66kV)	26181.332		14.223	10.523	4.714	2.784	4.454
Tariff 51B—over 4 GWh high voltage (CAC 33kV)	19356.332		14.223	10.523	5.632	2.784	4.454
Tariff 51C—over 4 GWh high voltage (CAC 22/11kV Bus)	17886.332		14.227	10.523	6.475	3.452	4.454
Tariff 51D—over 4 GWh high voltage (CAC 22/11kV Line)	17046.332		14.244	10.523	12.599	6.903	4.454
Tariff 52A—over 4 GWh high voltage (CAC STOU D 33/66kV) ^a	13581.332	13.666	14.112	10.523	7.477	12.248	4.454
Tariff 52B—over 4 GWh high voltage (CAC STOU D 22/11kV Bus) ^a	13581.332	13.671	14.116	10.523	5.250	44.093	4.454
Tariff 52C—over 4 GWh high voltage (CAC STOU D 22/11kV Line) ^a	13581.332	13.687	14.133	10.523	9.704	80.540	4.454
Tariff 53—over 40 GWh high voltage (ICC) ^b	17046.332		14.244		12.599	6.903	4.454

a. Peak demand is charged on maximum kVA demand during summer peak demand window times (weekdays between 10 am and 8 pm in December, January and February). Off-peak capacity is charged on the greater of either the customer's kVA authorised demand or the actual monthly half-hour maximum kVA demand. The actual monthly maximum demand is measured all year excluding summer peak demand window times (all year excluding weekdays between 10 am and 8 pm in December, January and February). Peak usage is charged on all usage in summer months (December, January and February). Off-peak usage is charged on all usage during non-summer months (March to November).

b. Ergon Distribution advised that ICCs do not incur connection unit charges on a network level.

Table 20 Transitional and obsolete regulated retail tariffs and prices (excl. GST), 2017–18

<i>Retail tariff</i>	<i>Fixed charge</i>	<i>Min charge</i>	<i>Usage rate 1^a</i>	<i>Usage rate 2^b</i>	<i>Usage rate 3^c</i>	<i>Usage rate (flat)</i>	<i>Capacity (up to 7.5kw)</i>	<i>Capacity (Over 7.5kw)</i>
	<i>c/day</i>	<i>c/day</i>	<i>c/kWh</i>	<i>c/kWh</i>	<i>c/kWh</i>	<i>c/kWh</i>	<i>\$/kW/yr</i>	<i>\$/kW/yr</i>
Tariff 20 (large) –transitional	76.858					37.595		
Tariff 21 –transitional		72.631	49.357	46.374	35.303			
Tariff 22 (small and large) – transitional	184.717		49.820		17.543			
Tariff 37 ^d –obsolete		30.623	21.807		54.544			
Tariff 62 –transitional	78.451		46.516	39.336	16.448			
Tariff 65 –transitional	78.003		36.894		20.321			
Tariff 66 –transitional	171.915					19.338	37.503	112.759

a. Tariff 21—first 100 kWh; tariff 22—7 am to 9 pm Mon. to Fri.; tariff 37—10.30 pm to 4:30 pm; tariff 62—7 am to 9 pm Mon. to Fri. first 10,000kWh; tariff 65—12hr peak.

b. Tariff 21—101 to 10,000 kWh; tariff 62—7 am to 9 pm Mon. to Fri. over 10,000 kWh.

c. Tariff 21—over 10,000 kWh; tariff 22—all other times; tariff 37—4.30 pm to 10:30 pm; tariffs 62, & 65—all other times.

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

Table 21 Obsolete high voltage regulated retail tariffs and prices (excl. GST), 2017–18

<i>Retail tariff</i>	<i>Fixed charge</i>	<i>Usage charge (flat/off-peak)</i>	<i>Demand charge (off-peak/flat)</i>
	<i>c/day</i>	<i>c/kWh</i>	<i>\$/kW/mth</i>
Tariff 47 ^a —obsolete	44689.726	12.446	27.864
Tariff 48 ^a —obsolete	46712.140	12.874	28.822

a. Tariffs 47 and 48 will become obsolete on 1 July 2017. They will only be available to customers taking continuous supply under tariffs 47 and 48 from 30 June 2017.

8.2 Customer impacts

Why will notified prices change between 2016–17 and 2017–18?

Notified prices will change between 2016–17 and 2017–18 due largely to movements in energy costs and network costs.

Energy costs will increase for all customers in 2017–18, primarily driven by substantial increases in wholesale energy costs. The changes in estimated wholesale energy costs are substantial and reflect the projected continued tightening of the demand-supply conditions in the Queensland region as well as other regions of the NEM in 2017–18. The QCA’s consultant, ACIL Allen, has advised that the tightening is due to several factors, including the increase in demand from in-field gas compression associated with the Queensland LNG export facilities, little additional renewable capacity in Queensland¹⁴⁵, and changes in the expected demand–supply balance in Victoria (the closure of Hazelwood power station in Victoria and continued operation of the Portland smelter).^{146 147}

In contrast, network costs have decreased for many customers. These decreases are a result of the AER’s final decisions on Energex’s and Ergon Energy’s 2015–20 distribution determinations, and the removal of Solar Bonus Scheme costs from network prices. However, these decreases have not been sufficient to completely offset the substantial increase in energy costs.

How will the QCA’s price determination impact on customer bills?

To illustrate the impacts of the final determination on customer bills, we have provided comparisons of the annual amount typical customers¹⁴⁸ would have paid under 2016–17 notified prices and the annual amount that they will pay under 2017–18 notified prices. It is important to note that this information is only intended to show the impact of the annual change in notified prices on a typical customer’s bill. It is not intended to demonstrate

¹⁴⁵ While a number of new renewable energy projects are planned, only a limited amount of new renewable generation will be fully operational in 2017–18, with a number of renewable energy projects likely to commence operation towards the end of, or after, the 2017–18 financial year in mid-2018.

¹⁴⁶ Wholesale electricity is sold through the NEM, which allows electricity to trade across five interconnected regions (Queensland, New South Wales, Victoria, South Australia and Tasmania). The interconnected nature of the market means changes in the demand/supply balance in one region will impact on other regions of the NEM.

¹⁴⁷ ACIL Allen, *Estimated Energy Costs—2017–18 Retail Tariffs*, 11 January 2017, p. 24.

¹⁴⁸ The typical customer for a given retail tariff is the median or middle customer in terms of consumption out of all customers on that tariff in regional Queensland. The typical customer consumption data is provided by Ergon Retail and more information is provided at Appendix H.

the annual change in the total amount a customer will pay their electricity retailer in a given year.

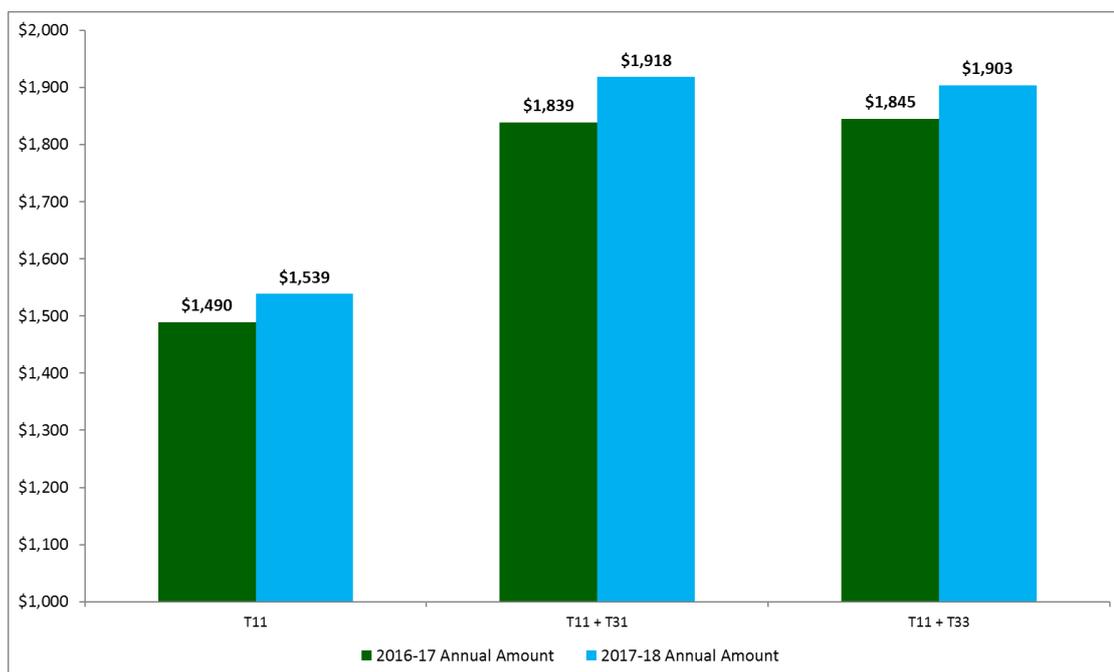
Many customers will incur additional charges that are not set by the QCA and cannot legally be included in notified prices. For example, most customers will also pay metering charges. These charges are set by the AER and will vary from customer to customer depending on a range of factors, including (but not limited to) the type of meter installed, the number of tariffs a customer uses and whether a customer has a solar power system. As these charges do not form part of notified prices or the QCA’s price determination, they have not been included in the customer impact analysis for notified prices.

Residential customers

The main retail tariff for residential customers is tariff 11. Many customers on tariff 11 are also on one of the controlled load tariffs (tariffs 31 and 33)¹⁴⁹.

The annual notified price bill for a typical customer on tariff 11 will increase by 3.3 per cent from \$1,490 (GST inclusive) to \$1,539 (GST inclusive), as a result of the change in notified prices between 2016–17 and 2017–18. For a typical customer on a combination of tariffs 11 and 31 or tariffs 11 and 33, the increase will be 4.3 per cent and 3.1 per cent respectively. However, the impact on individual customers will vary depending on their consumption. Customers with lower consumption than the typical customer will face smaller increases while higher-consumption customers face larger increases.

Figure 14 Impact of the change in notified prices on typical residential customers (incl. GST), 2017–18



Note: The annual amounts have been rounded to the closest dollar.

¹⁴⁹ Controlled load tariffs may be used for appliances such as water heaters and pool pumps. These tariffs are generally cheaper than tariff 11 as customers are only guaranteed supply for a set number of hours (tariff 31 guarantees supply for 8 hours per day and tariff 33 guarantees supply for 18 hours per day).

Table 22 Further detail on the impact of the change in notified prices on customers on the main residential tariff (tariff 11, incl. GST), 2017–18

Description	Annual consumption (kWh)	2016–17 annual amount (\$)	2017–18 annual amount (\$)	Change	
				(\$)	(%)
25th Percentile customer ^a	2568	\$1,055.06	\$1,081.42	\$26.36	2.5%
Median customer ^b	4173	\$1,489.55	\$1,538.51	\$48.96	3.3%
75th Percentile customer ^c	6478	\$2,113.54	\$2,194.95	\$81.41	3.9%

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.

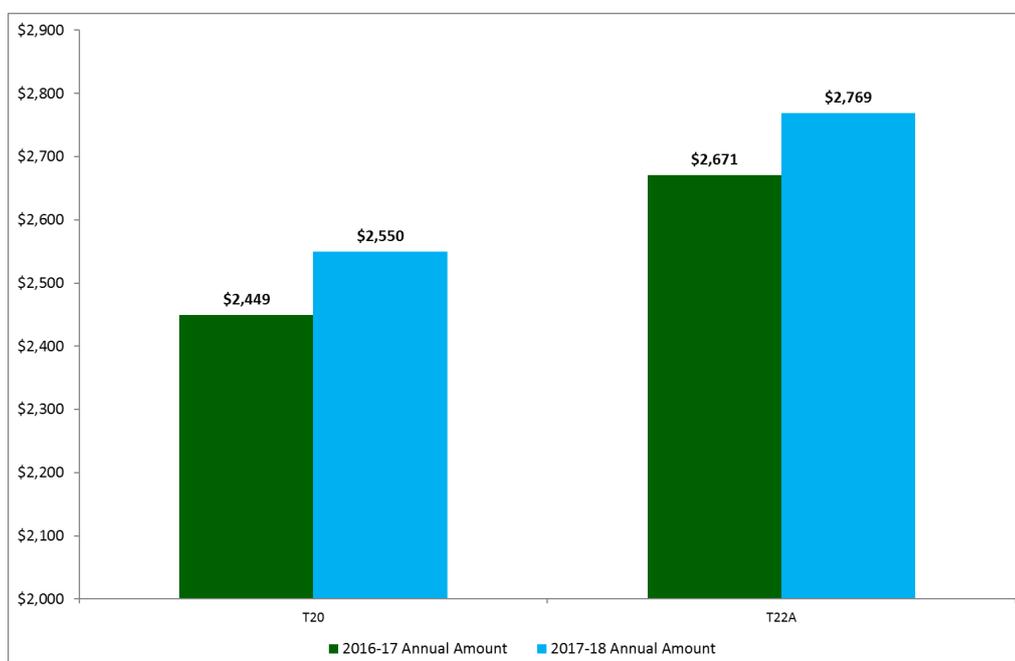
c Three-quarters of regional Queensland customers will use less electricity than the 75th percentile customer.

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.

Small business customers

The annual notified price bill for a typical customer on the main small business tariff (tariff 20) will increase by \$101 or 4.1 per cent as a result of the change in notified prices between 2016–17 and 2017–18. For a typical customer on the seasonal time-of-use tariff (tariff 22A), the expected increase will be slightly lower, at 3.6 per cent.

However, it is important to note that bill impacts for individual customers will vary depending on their level of consumption and, if the customer is on tariff 22A, the pattern of their consumption.

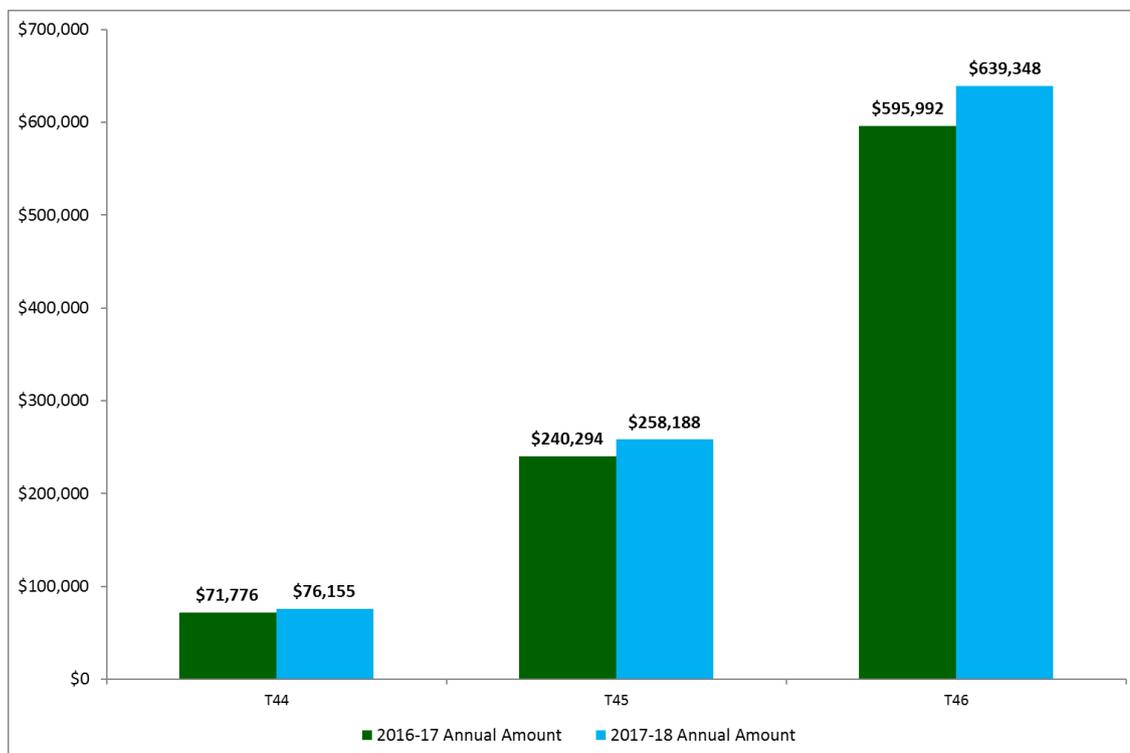
Figure 15 Impact of the change in notified prices on typical small business customers (incl. GST), 2017–18

Note: The annual amounts have been rounded to the closest dollar.

Large business customers

Typical large business customers will see increases in their annual notified price bills of between 6.1 per cent and 7.4 per cent as a result of the change in notified prices between 2016–17 and 2017–18. However, it is important to note that bill impacts for individual customers will vary depending on their level and pattern of consumption.

Figure 16 Impact of the change in notified prices on typical large business customers (incl. GST), 2017–18



Note: The annual amounts have been rounded to the closest dollar.

What is the QCA's approach to transitional and obsolete tariffs?

Some business customers, including farmers and irrigators, are supplied under transitional or obsolete tariffs. These retail tariffs are legacy retail tariffs for which there is no corresponding network tariff. As a result, the prices of these tariffs cannot be determined under the N+R cost build-up methodology.

Transitional and obsolete 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 incur lower electricity bills if they moved immediately to a standard business tariff, but some customers would face much higher bills.

The QCA has maintained transitional arrangements for 2017–18 and adjusted the charges in each transitional and obsolete tariff in line with the percentage increases in the standard business tariffs customers would otherwise pay. The QCA has also applied an additional escalation factor to limit charges for transitional and obsolete tariffs falling further below cost in dollar terms. This approach is consistent with the QCA's general approach in previous price determinations.

The QCA has also introduced transitional arrangements for customers on existing high voltage retail tariffs, as Ergon Distribution intends to phase out the network tariff underlying these

tariffs in 2017–18. Under the transitional arrangements, the two high voltage retail tariffs (tariffs 47 and 48) have been classed as obsolete and therefore will only be available to existing customers for a transitional period of five years. Consistent with our approach to other transitional and obsolete tariffs, we have adjusted these tariffs in line with changes in the relevant standard business tariffs, and applied escalation factors to limit charges falling further below cost, in dollar terms.

We consider that this approach strikes the right balance, as it will allow existing customers on the two high voltage retail tariffs time to adjust their operations before moving to alternative retail tariffs. It also ensures that new customers do not make long-term investment and business decisions based on legacy high voltage tariffs that will only be available for five years. Given that many of these customers are likely to be using very large amounts of energy (tariff 48 customers are some of the largest energy users in Queensland) and making significant capital investments, we consider it is important that they make those decisions based on the correct pricing signals.

Table 23 shows price changes and transition periods for all transitional and obsolete tariffs.

Table 23 Final decision—transitional arrangements for 2017–18

<i>Obsolete or transitional tariff</i>	<i>Period to be retained (years)</i>	<i>2017–18 price increase (%)</i>
Tariff 20 (large)—transitional	3	7.6
Tariff 21—transitional	3	5.1
Tariff 22 (small and large)—transitional	3	7.6
Tariff 37—obsolete	3	7.6
Tariff 47—obsolete	5	7.6
Tariff 48—obsolete	5	11.3
Tariff 62—transitional	3	5.1
Tariff 65—transitional	3	4.5
Tariff 66—transitional	3	4.5

GLOSSARY

AEMC	Australian Energy Market Commission
AEMO	Australian Energy Market Operator
AER	Australian Energy Regulator
AFMA	Australian Financial Markets Association
ASMC	Australian Sugar Milling Council
CAC	Connection Asset Customer
CPI	Consumer Price Index
c/day	cents per day
DUOS	Distribution Use of System
Ergon Distribution	Ergon Energy Corporation Limited (electricity distribution arm)
Ergon Retail	Ergon Energy Queensland (electricity retail arm)
Electricity Act	Electricity Act 1994 (Qld)
ESCOSA	Essential Services Commission of South Australia
GST	Goods and services tax
GWh	Gigawatt hour
Government	Queensland Government
HV	High Voltage
HVL	High Voltage Line
ICC	Individually Calculated Customer
IPART	Independent Pricing and Regulatory Tribunal
kWh	Kilowatt hour
kVA	Kilovolt Ampere
kVr	Kilovolt Reactive
LGC	Large-scale generation certificate
LNG	Liquefied natural gas
LRET	Large-scale Renewable Energy Target
Minister	Minister for Energy, Biofuels and Water Supply
MWh	Megawatt hour
N	Network costs
NECF	National Energy Customer Framework
NEM	National Electricity Market
NERL	National Energy Retail Law
NERR	National Energy Retail Rules
Notified prices	Regulated retail electricity prices
NSLP	Net System Load Profile
N+R	Network + Retail cost build-up methodology
NSW	New South Wales
Origin	Origin Energy
QCA	Queensland Competition Authority
QCOSS	Queensland Council of Social Service
QFF	Queensland Farmers' Federation
QPC	Queensland Productivity Commission
R	Energy and retail cost
RET	Renewable Energy Target
RHS	Right hand side
ROC	Retail operating costs
ROLR	Retailer of last resort
RPP	Renewable power percentage
SA	South Australia
SAC	Standard Asset Customer

SRES	Small-scale Renewable Energy Scheme
STC	Small-scale technology certificate
STOUD	Seasonal time-of-use demand
STP	Small-scale technology percentage
TUOS	Transmission use of system
TWh	Terawatt hour
UTP	Uniform Tariff Policy

APPENDIX A: MINISTERIAL DELEGATION AND COVER LETTER



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

Our Reference: CTS14406/17

Level 34, 1 William Street Brisbane 4000
GPO Box 2644 Brisbane
Queensland 4001 Australia
Telephone +61 7 3719 7300
Email energyandwatersupply@ministerial.qld.gov.au
Website www.dews.qld.gov.au

31 MAY 2017

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

Dear Professor Green

Re: New Delegation to determine Regulated Retail Electricity Prices for 2017–18

I write to you to issue a new Delegation and Terms of Reference to the Queensland Competition Authority (QCA) for the determination of regulated retail electricity prices in regional Queensland for 2017–18 under section 90AA(1) of the *Electricity Act 1994* (the Act).

While recognising that the prices outlined in the 2017-18 Final Determination on 31 May 2017 were developed in accordance with the requirements under the Act, the Government is very concerned about the impact on consumers that will result from these prices. As such, the Government has taken steps to deliver price relief for Queensland electricity consumers by directing Energy Queensland to remove charges for the Solar Bonus Scheme from network prices, over the three years through to 2019-20. This action will assist in mitigating the impact of rising wholesale prices which are impacting retail electricity prices across the National Electricity Market (NEM), including Queensland.

I am issuing a new Delegation, attached to this letter, so the QCA can incorporate those revised network tariffs into its Final Determination. The new Delegation retains the previously specified methodology used to calculate the regulated retail electricity prices for 2017-18, and the matters the QCA must consider.

Because there are no methodology changes, I consider the existing rounds of public consultation already undertaken by the QCA to be satisfactory. In accordance with section 90AA(3)(e) of the Act, further public consultation is not required.

The Government's Uniform Tariff Policy and promoting greater levels of retail competition remain important considerations when setting regulated retail electricity prices in regional Queensland.

The deregulation of retail electricity prices for small customers in South East Queensland (SEQ) on 1 July 2016 removed a reference point for the determination of prices in regional Queensland. To maintain consistency with the regulation of prices in previous years, the Government considers that regulated prices for small customers in regional Queensland should continue to broadly reflect the expected prices for small customers on standing offers in SEQ.

The new Delegation requires that the QCA issue its Final Determination by 16 June 2017.

If you require further information please contact Mr Benn Barr, Deputy Director-General - Energy on (07) 3199 4977.

Yours sincerely

A handwritten signature in blue ink, appearing to read 'Mark Bailey'.

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

Att: New Delegation and Terms of Reference – Determination of Regulated Retail Electricity
Prices for 2017-18

ELECTRICITY ACT 1994
Section 90AA(1)

DELEGATION

I, Mark Bailey, the Minister for Energy, Biofuels 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 standard contract customers for customer retail services in the Ergon Energy Corporation Limited (EECL) distribution area for the tariff year 1 July 2017 to 30 June 2018.

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 2017 to 30 June 2018.
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) On 1 July 2016, price regulation in the Energex distribution area was removed for small customers. This means that notified prices 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, small standard retail contract customers and large 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;

DELEGATION TO 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) 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 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. The Interim Consultation Paper published 16 November 2016, and resulting considerations by the QCA in accordance with the original delegation for 2017-18 remain relevant for this delegation. In accordance with section 90AA(3)(e) of the Act, a new Interim Consultation Paper is not required.

Consultation Timetable

9. As the methodology to determine retail tariffs is the same as that contained in the original delegation for 2017-18, the consultations and considerations by the QCA in accordance with the original delegation remain relevant for this delegation. In accordance with section 90AA(3)(e) of the Act, a new consultation timetable is not required.

DELEGATION TO QCA

Workshops and additional consultation

10. The workshops and additional consultation conducted under the original delegation for 2017-18 and resulting considerations by the QCA in accordance with the original delegation remain relevant for this delegation. In accordance with section 90AA(3)(e) of the Act, a new round of workshops and additional consultation is not required.

Draft Price Determination

11. The draft determination published on 24 February 2017 by the QCA in accordance with the original delegation for 2017-18 remains relevant for this delegation. In accordance with section 90AA(3)(b) of the Act, the QCA is not required to publish a draft determination based the new delegation.

Final Price Determination

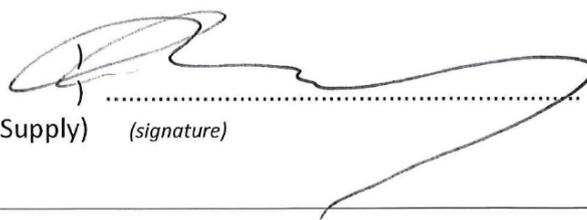
14. QCA must investigate and publish its final price determination on regulated retail electricity tariffs, with each tariff to be presented as a bundled price, and gazette the bundled retail tariffs.

Timing

18. QCA must publish the final price determination on regulated retail electricity tariffs for the 2017–18 tariff year, and have the bundled retail tariffs gazetted, no later than 16 June 2017.
19. This Delegation supersedes the previous Delegation issued on 10 November 2016.

DATED this 31st day of May 2017.

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



APPENDIX B: SUBMISSIONS RECEIVED UNDER THE NOVEMBER 2016 DELEGATION

Submissions to the interim consultation paper

- Auctus Resources
- Australian Sugar Milling Council
- Canegrowers (late submission received 22 December 2016)
- Canegrowers Isis
- Energy Queensland
- Queensland Electricity Users Network
- Queensland Farmers' Federation
- Queensland Consumers Association
- Queensland Council of Social Service

Submissions to the draft determination

- Australian Sugar Milling Council
- Canegrowers
- Canegrowers Isis
- Chamber of Commerce and Industry Queensland
- Cotton Australia
- Energy Queensland
- Origin Energy
- Queensland Consumers Association
- Queensland Council of Social Service
- We have also received two confidential submissions.

APPENDIX C: RESPONSES TO ADDITIONAL ISSUES RAISED IN SUBMISSIONS RECEIVED UNDER THE NOVEMBER 2016 DELEGATION

This section outlines responses we provided to additional issues raised in submissions received under the November 2016 delegation and which have not been addressed in this final determination.

<i>Stakeholder comment</i>	<i>Stakeholder</i>	<i>QCA response</i>
There were errors in Ergon Distribution's 2016 Tariff Structure Statement.	Canegrowers	The approval of Ergon Energy's Tariff Structure Statements is a matter for the Australian Energy Regulator (AER). Under the Queensland Government's N+R cost build-up method, we treat Ergon Energy's network costs as a pass-through.
The QCA's draft determination did not consider the appropriateness in how the network costs (return on capital, return of capital, capex and opex) are calculated.	Canegrowers Isis	The QCA has no power in assessing or determining the cost-recovery for distribution networks. The AER decides or approves the return on capital, return of capital, capex and opex of the distribution companies in Queensland (Energex and Ergon Energy). That feeds into the network tariffs they charge. The Queensland Government's May 2017 delegation makes it clear that the QCA is required to consider an N+R cost build-up approach where the network component is treated as a pass-through (from the distribution companies).
Canegrowers Isis implores the QCA that the increases in transitional and obsolete tariffs in the final determination do not exceed the increases proposed in the draft determination.	Canegrowers Isis	The QCA published the draft determination to seek comments from the stakeholders and the public. Market and policy environments have changed between the draft and the final determination. We consider that to 'freeze' a price change for any retail tariff is inconsistent with the pricing principles we outlined in Chapter 1, and would be an inappropriate pricing approach.
Canegrowers Isis asks the QCA to advise 'as to the proposed system to provide drought relief when the 2020 tariff changeover occurs'.	Canegrowers Isis	Drought relief is a policy matter for the Queensland Government.
The QCA should allow customers to elect to be on a range of tariffs and later confirm the tariff at the end of each quarter.	Canegrowers Isis	The QCA determines notified prices under the Electricity Act as delegated by the Queensland Government. Flexible or retrospective tariff selection is outside the scope of this report.
Some aspects of the Gazette Notice in the draft determination need to be amended: controlled load tariffs; billing information description under each retail tariff; change retail tariff following distributor rules; change back the wording for transitional tariffs 21 and 37 from 'daily supply charge' to 'minimum payment per day'.	Energy Queensland	The aspects of the Gazette Notice mentioned by Energy Queensland are drafted by the Department of Energy and Water Supply (DEWS). DEWS has considered Energy Queensland's comments when drafting the Gazette Notice (see Appendix G).

<i>Stakeholder comment</i>	<i>Stakeholder</i>	<i>QCA response</i>
The QCA should use Ergon Energy's network tariff structures in determining all retail prices for small customers. The application of the UTP means the QCA should let Ergon Energy recover an amount (quantum) of revenue for its network costs in regional Queensland that is equivalent to Energex's revenue collected for its network costs.	Energy Queensland	<p>The QCA's responsibility under the Queensland Government's May 2017 delegation is to decide notified prices, not the revenue of regulated businesses. The UTP, as defined by the Minister, concerns the overall retail price. We have set notified retail prices accordingly.</p> <p>The delegation also requires us to consider Energex tariffs structures in setting non time-of-use tariffs for small customers; and consider Ergon Energy's tariff structures, in setting time-of-use tariffs for small customers. We have set notified prices accordingly.</p>
Prices for regional customers should be minimised to the greatest extent possible in 2017–18 because affordable electricity is essential to the wellbeing of communities.	QCOSS	<p>The QCA must set notified prices in accordance with the requirements of the Electricity Act and the Queensland Government's May 2017 delegation. Chapter 1 outlines legal requirements that apply to the QCA when it determines notified prices.</p> <p>The Queensland Government has implemented the UTP, which results in a subsidy paid to customers of Ergon Energy Retail. We have set prices in accordance with the UTP. See Chapter 2.</p> <p>The QCA has also considered affordability by specifying transitional arrangements for legacy tariffs, which smoothes the bill impact for regional customers transitioning to standard business tariffs.</p>
The QCA should present bill impacts for a wider range of customer usage levels.	QCOSS	<p>The QCA has provided detailed bill impacts for tariff 11 customers who use more than the typical (median) customer (the 75th percentile), as well as customers who use less (the 25th percentile). See Table 22, Chapter 8.</p> <p>The QCA has also provided bill impacts for residential customers on common tariff combinations T11+T31 and T11+T33 based on median consumption data. See Figure 3 in the Executive Summary and Figure 14 in Chapter 8.</p> <p>We consider this information is sufficient to illustrate the potential impacts of the QCA's decision on 2017–18 notified prices.</p>
The QCA should include metering costs in its bill impact analysis and fact sheets even though it does not form part of the QCA's determination, because the determination refers to customers' 'annual bills' not 'annual notified price bills'. The chart titles in the tariff fact sheets accompanying draft determination were misleading.	QCOSS	<p>As QCOSS recognises, under the Electricity Act, metering charges cannot legally be included in notified prices. The charges also vary from customer to customer.</p> <p>As the metering charges do not form part of notified prices or the QCA's price determination, and as it is inaccurate to apply one metering cost to an entire customer group, we do not include metering charges in the customer impact analysis for notified prices.</p> <p>We have reviewed the chart titles in our report and fact sheets to improve clarity.</p>
The QCA should provide information such as availability of concessions and hardship support in its fact sheets.	QCOSS	The QCA has provided this information in Appendix I: Summary of concessional arrangements for energy in Queensland.

<i>Stakeholder comment</i>	<i>Stakeholder</i>	<i>QCA response</i>
Regulated retail electricity prices for all businesses in regional Queensland in 2017–18 must be reduced by 16 per cent compared to 2016–17.	QEUN	The QCA determines notified prices under the Electricity Act as delegated by the Queensland Government. We made our determination on the regulated retail prices after considering all the matters we are required to consider under the Electricity Act and the May 2017 delegation. See Chapter 2 for a full discussion of our pricing approach.
The cost build-up methodology that the QCA uses ignores concerns about affordability.	QEUN	The QCA sets notified prices in accordance with the requirements of the Electricity Act and the Queensland Government's May 2017 delegation. The Queensland Government has considered affordability in making its delegation by putting forward the UTP, which subsidises electricity prices for regional customers. The QCA has considered affordability by specifying transitional arrangements in tariffs, which smoothes the bill impact for regional customers.
The cost build-up methodology that the QCA follows from the delegation fails to comply with the National Electricity Objective (under the National Electricity Law).	QEUN	The QCA determines notified prices under the Electricity Act. We are required to consider, and we have considered, the objects of the Electricity Act rather than the National Electricity Objective. See Chapter 2 for a consideration of the objects of the Electricity Act.
The QCA has not complied with the monopoly investigation provisions of the Queensland Competition Authority Act 1997 (QCA Act).	QEUN	As the QCA is required to determine notified prices in accordance with the requirements in the Electricity Act, the monopoly investigation provisions in the QCA Act do not apply to the 2017–18 price determination.
The QCA's consultation program is a 'tick the box' exercise.	QEUN	The QCA has held consultation workshops in regional centres in Queensland since 2013–14. We consider seriously and carefully the feedback from these workshops as well as the issues raised in the submissions.
The process for electricity price reform is flawed and needs a complete review.	QFF	The Queensland Productivity Commission has completed a comprehensive review on electricity pricing in Queensland, in which it has made recommendations to the Queensland Government on the pricing process. Any further review is a matter for the Queensland Government.

APPENDIX D: NETWORK TARIFF STRUCTURES

This appendix provides further information on the final decisions in Chapter 3. Energex and Ergon Distribution network tariff structures are compared and the way tariffs have been adjusted to make them consistent with the UTP is outlined.

Comparison of Energex and Ergon Energy's tariff structures

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

<i>Distributor</i>		<i>Peak</i>	<i>Shoulder</i>	<i>Off-peak</i>
Residential (time-of-use)				
Energex	Usage	4 pm–8 pm weekdays (weekdays include government specified public holidays)	7 am–4 pm, 8 pm–10 pm weekdays (weekdays include government specified public holidays) 7 am–10 pm weekends	10 pm–7 am every day
Ergon Distribution (retail tariff 12A)	Usage	3 pm–9.30 pm any day of the week, summer ^a months only		All other times
Residential (time-of-use demand)				
Energex (introduced on 1 July 2016)	Usage	Flat usage charge		
	Demand	4 pm–8 pm workdays (workdays are weekdays but exclude government-specified public holidays)		
Ergon Distribution (retail tariff 14)	Usage	Flat usage charge		
	Demand	3 pm–9.30 pm any day of the week, summer ^a months only		3 pm–9.30 pm any day of the week, non-summer ^a months
Small business (time-of-use)				
Energex	Usage	7 am–9 pm, weekdays (weekdays include government-specified public holidays)		All other times
Ergon Distribution (retail tariff 22A)	Usage	10 am–8 pm on summer ^a weekdays		All other times

Distributor		Peak	Shoulder	Off-peak
Small business (time-of-use demand)				
Energex (to be introduced on 1 July 2017)	Usage	Flat usage charge		
	Demand	9 am–9 pm weekdays (workdays are weekdays but exclude government-specified public holidays)		
Ergon Distribution (retail tariff 24)	Usage	Flat usage charge		
	Demand	10 am–8 pm on summer ^a weekdays		10 am–8 pm weekdays in non-summer ^a months

a. Summer months are December, January and February.

Table 25 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		

Adjusting Ergon Distribution network tariffs

This section outlines the methodology used in section 3.2.3 to adjust Ergon Distribution network charges to reflect Energex price levels, while retaining Ergon Distribution tariff structures. This approach is consistent with the approach we adopted in the 2016–17 determination.

Establishing network prices

To calculate network prices that reflect Ergon Distribution tariff structures and Energex price levels, we used information on network charges provided by the distributors¹⁵⁰ and customer usage data provided by Ergon Distribution and Ergon Retail. Using this data, we then lowered charges under the relevant Ergon Distribution network tariff¹⁵¹ to a level where the average customer pays the same as they would under the equivalent Energex network tariff.

This calculated network tariff has then been 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 network tariffs 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, we adjusted all charges under the Ergon Distribution network tariff so that the average customer will pay the same total network cost as they would be under the equivalent Energex flat rate network tariff.

The results are shown in tables 26 and 27.

Table 26 Network price options for tariff 12A

	<i>Fixed c/day</i>	<i>Peak/flat c/kWh</i>	<i>Off-peak c/kWh</i>
Energex 8400	47.100	9.267	N/A
Ergon Distribution ERTOUT1	135.400	39.435	5.141
QCA-adjusted Ergon Distribution ERTOUT1	49.685	39.435	5.141

Note: Based on data provided by Ergon Distribution and Ergon Retail, annual usage is taken as 5,035 kWh, with 11.48% peak usage and 88.52% off-peak usage.

Table 27 Network price options for tariff 22A

	<i>Fixed c/day</i>	<i>Peak/flat c/kWh</i>	<i>Off-peak c/kWh</i>
Energex 8500	63.900	10.510	N/A
Ergon Distribution EBTOU1	135.400	44.523	9.134
QCA-adjusted Ergon Distribution EBTOU1	63.900	35.398	7.262

Note: Based on data provided by Ergon Distribution and Ergon Retail, annual usage is taken as 13,718 kWh, with 11.54% peak usage and 88.46% off-peak usage.

¹⁵⁰ Energex and Ergon Distribution.

¹⁵¹ Network tariffs applying to Ergon Distribution's east pricing zone, transmission region one.

Time-of-use demand tariffs

Ergon Distribution has seasonal time-of-use network tariffs for residential and small business customers. These network tariffs form the basis of retail tariffs 12A (residential) and 22A (small business). To calculate network prices for these retail tariffs, we uniformly reduced all charges of the relevant 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.

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

Table 28 Network price options for tariff 14

	<i>Fixed c/day</i>	<i>Usage c/kWh</i>	<i>Peak demand \$/kW/month</i>	<i>Off-peak demand \$/kW/month</i>
Energex 8400	47.100	9.267	N/A	N/A
Ergon Distribution ERTOUDCT1	10.400	2.741	76.220	11.500
QCA-adjusted Ergon Distribution ERTOUDCT1	7.687	2.026	56.335	8.500

Note: Based on data provided by Ergon Distribution and Ergon Retail, annual usage is taken as 5,053 kWh with a peak demand of 1.43 kW per month and an off-peak demand of 3.48 kW per month.

Table 29 Network price options for tariff 24

	<i>Fixed c/day</i>	<i>Usage c/kWh</i>	<i>Peak demand \$/kW/month</i>	<i>Off-peak demand \$/kW/month</i>
Energex 8500	63.900	10.510	N/A	N/A
Ergon Distribution EBTOUDCT1	10.400	3.441	94.720	10.000
QCA-adjusted Ergon Distribution EBTOUDCT1	9.414	3.041	85.742	9.052

Note: Based on data provided by Ergon Distribution and Ergon Retail, annual usage is taken as 13,718 kWh with a peak demand of 2.77 kW per month with an off-peak demand of 6.27 kW per month.

Non-time-of-use tariffs

As discussed in Chapter 3, we examined the impact of using Ergon Distribution's inclining block tariff structure as the basis for flat-rate retail tariffs 11 (residential) and 20 (small business). For the purposes of this assessment, we calculated network prices by uniformly reducing all charges of the relevant 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 an Energex flat rate tariff. Network prices calculated using this approach are consistent with the UTP.

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

Table 30 Network price options for tariff 11

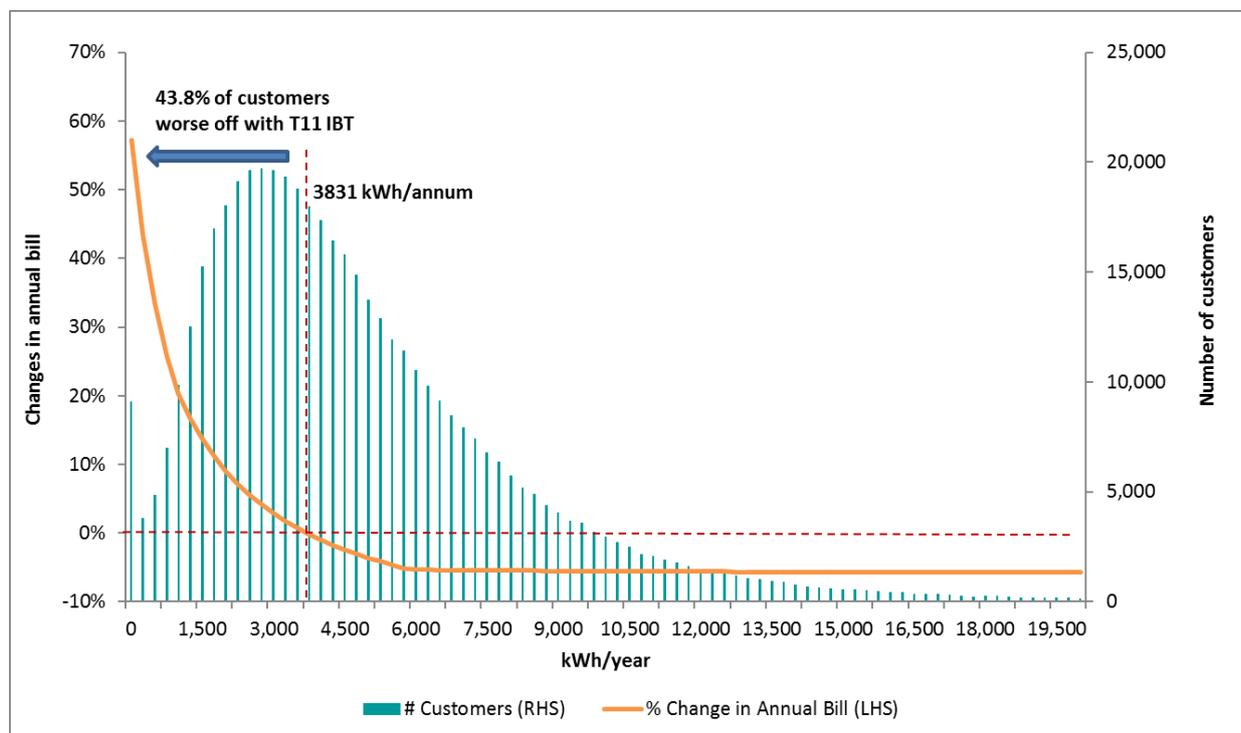
	Fixed c/day	Usage c/kWh		
		Flat/first block ^a	Second block ^b	Third block ^c
Energex 8400	47.100	9.267	N/A	N/A
Ergon Distribution ERIBT1	135.400	3.091	7.091	10.541
QCA-adjusted Ergon Distribution ERIBT1	102.053	2.330	5.345	7.945

a. Usage charge applies to all usage under an Energex network tariff (row 1). Usage charge applies to usage of less than 2.74 kWh per day under an Ergon Distribution network tariff (rows 2 and 3)

b. Usage charge applies to usage greater than 2.74 kWh per day and less than 16.43 kWh per day under an Ergon Distribution network tariff (rows 2 and 3)

c. Usage charge applies to usage above 16.43 kWh per day under an Ergon Distribution network tariff (rows 2 and 3)

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



a. IBT stands for inclining block tariffs.

b. RHS stands for right hand side. LHS stands for left hand side.

c. 43.8 % of customers (consuming below 3831 kWh/annum) will be worse off moving from a residential flat tariff (tariff 11) to Ergon Distribution inclining block tariff structure.

Table 31 Network price options for tariff 20

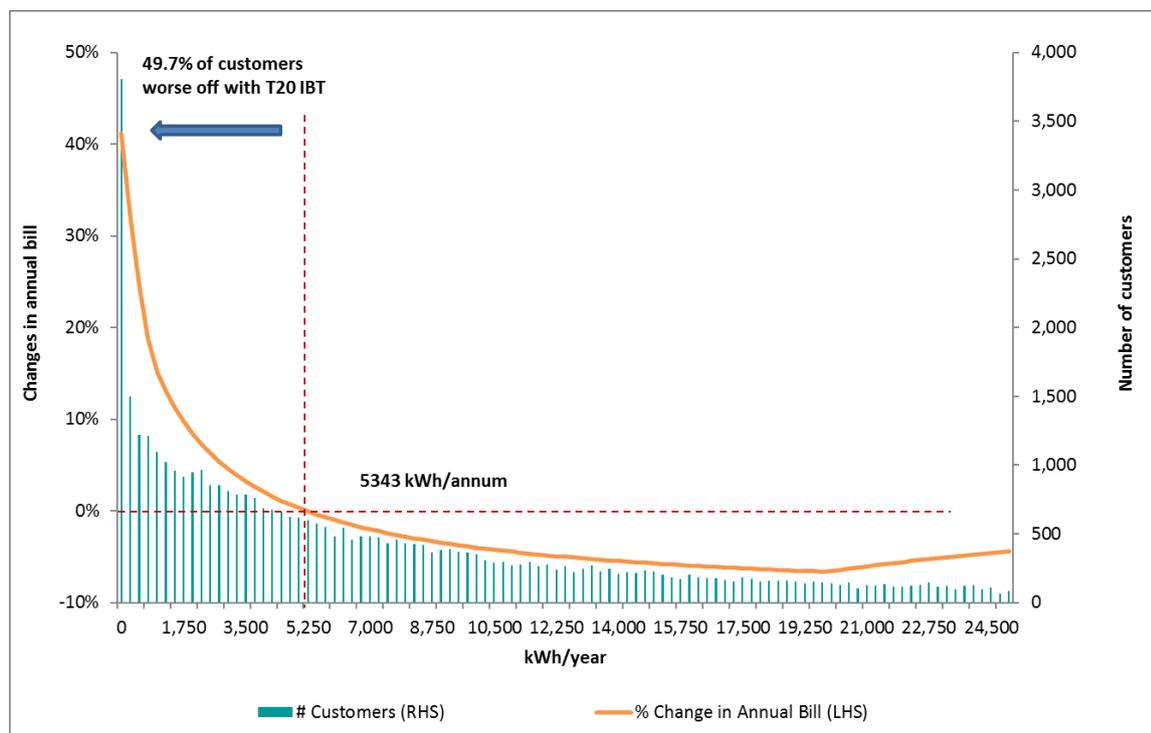
	Fixed c/day	Usage c/kWh		
		Flat/first block ^a	Second block ^b	Third block ^c
Energex 8500	63.900	10.510	N/A	N/A
Ergon Distribution EBIBT1	135.400	3.441	9.459	13.460
QCA-adjusted Ergon Distribution EBIBT1	117.748	2.993	8.226	11.706

a. Usage charge applies to all usage under an Energex network tariff (row 1). Usage charge applies to usage of less than 2.74 kWh per day under an Ergon Distribution network tariff (rows 2 and 3).

b. Usage charge applies to usage greater than 2.74 kWh per day and less than 54.76 kWh per day under an Ergon Distribution network tariff (rows 2 and 3).

c. Usage charge applies to usage above 54.76 kWh per day under an Ergon Distribution network tariff (rows 2 and 3).

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



a. IBT stands for inclining block tariffs.

b. RHS stands for right hand side. LHS stands for left hand side.

c. 49.7% of customers (consuming below 5343 kWh/annum) will be worse off moving from a small business flat tariff (tariff 20) to Ergon Distribution inclining block tariff structure.

APPENDIX E: RETAIL COST ALLOWANCES

The QCA will base 2017–18 retail costs on the allowances established in the 2016–17 price determination. This appendix outlines how the QCA calculated fixed and variable retail cost allocators in 2016–17. For more information on the retail cost determination process, please see our 2016–17 price determination and ACIL Allen's report on estimating the efficient retail costs. Both documents are available on our [website](#).¹⁵²

Retail costs for residential and small business customer retail tariffs

To allocate the fixed retail cost component, the total annual fixed benchmark retail cost (not including an allowance for regulatory fees) derived in 2016–17 was 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 derived variable retail cost allocators, as set out in Table 32, column E below. These allocators represent the variable retail cost component derived in 2016–17 (column B) as a percentage of total 2016–17 variable costs, excluding the variable retail cost component (column D). This approach generated percentage factors which allowed 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 in dollar terms 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.

Table 32 2016–17 Allocation of fixed and variable retail costs and variable cost allocators

<i>Customer class</i>	<i>A</i> <i>Benchmark fixed retail component (\$/customer/yr)</i>	<i>B</i> <i>Benchmark variable retail component (\$/customer/yr)</i>	<i>C</i> <i>Benchmark variable retail component (c/kWh)</i>	<i>D</i> <i>Benchmark total variable cost^a (\$/customer/yr)</i>	<i>E</i> <i>Variable retail costs allocator^b (%)</i>
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 multiplied the underlying variable cost component of each tariff (net of variable retail costs) by the appropriate variable retail cost allocator

¹⁵² <http://www.qca.org.au/Electricity/Regional-consumers/Reg-Electricity-Prices/Final-Report/Regulated-Electricity-Prices-2016-17#finalpos>.

(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 33.

All residential and small business tariffs will include both fixed and variable retail cost components, except for controlled load tariffs 31 and 33 which are secondary tariffs and attract a variable retail cost only.

Table 33 Allocation of total retail costs to fixed and variable components—residential and small business customer tariffs

<i>Tariff</i>	<i>Customer category for assigning retail cost allowance</i>	<i>Fixed retail component</i>	<i>Variable retail cost allocator</i>
Residential (T11, 12A & 14)	Residential	Yes	11.27%
Controlled loads (T31 & 33)	Residential	No	11.27%
Small business (T20, 22A, 24 & 41)	Business—small	Yes	12.80%
Other unmetered loads—T91	Business—small	No	12.80%

Retail costs for large and very large business customer tariffs

As ACIL was not able to benchmark 2016–17 retail costs for large and very large business customer tariffs, we decided to retain the 2015–16 large business customer retail operating cost allowances in real terms.

We escalated the 2015–16 estimated retail operating costs (plus the margin allocated to the fixed component) to 2016–17 values using the forecast change in the CPI. This is consistent with our approach in previous years. We assumed an inflation rate of two per cent which is 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 2017.¹⁵³

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.

To apply a methodology consistent with that applied to small customer tariffs, the ROC allowance (plus the margin allocated to the fixed component) was taken as the fixed retail cost component and a variable component equal to the margin of 5.7 per cent that we applied in 2015–16. To allocate the variable retail 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 34. The choice of allocator for each retail tariff is based on the category of customer accessing the tariff, also as set out in Table 34. 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.

¹⁵³ Reserve Bank of Australia, *Statement on Monetary Policy*, May 2016, p. 61.

Table 34 Allocation of total retail costs to fixed and variable components—large and very large business customer tariffs

<i>Tariff</i>	<i>Customer category for assigning retail cost allowance</i>	<i>Fixed retail component</i>	<i>Variable retail cost allocator</i>
Tariffs 44, 45, 46 & 50	Business—large	Yes	6.0445%
Tariff 71	Business—large	No	6.0445%
Tariffs 51A–D, 52A–C, 53	Business—very large	Yes	6.0445%

APPENDIX F: TRANSITIONAL AND OBSOLETE TARIFFS—CUSTOMER IMPACTS

In Chapter 7 we discuss our decision on arrangements for customers on transitional and obsolete retail tariffs. This decision is based on updated data provided by Ergon Retail for the final determination.

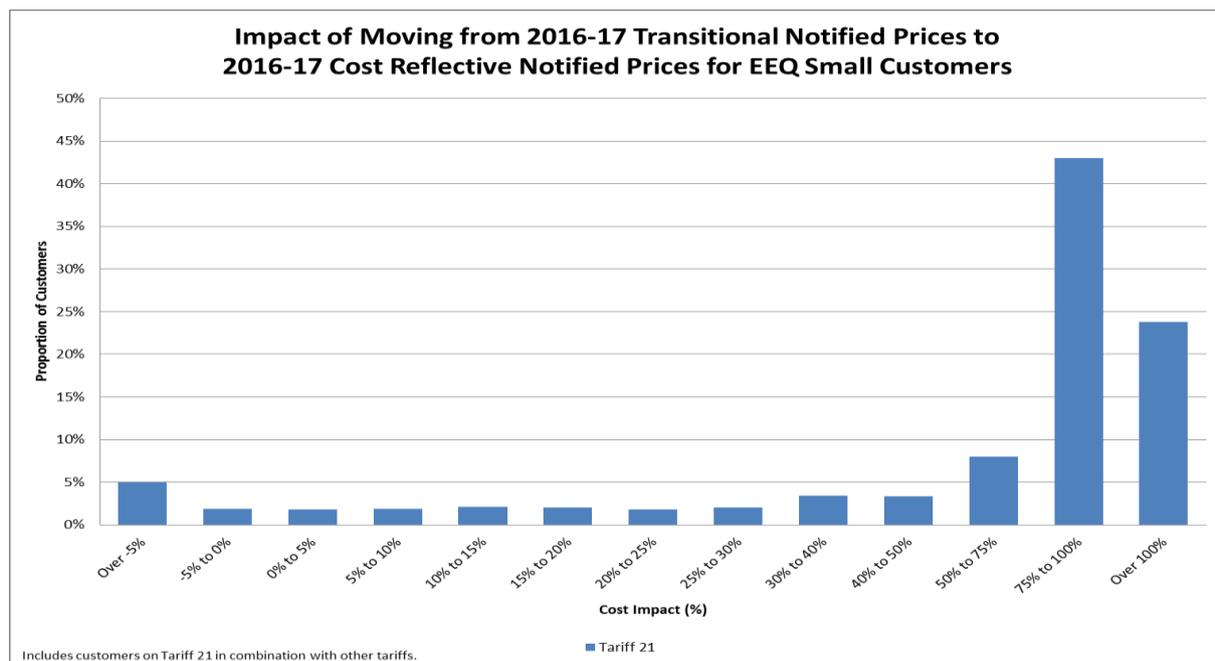
This appendix contains the analysis of bill impacts for customers moving from their transitional or obsolete 2016–17 tariff to an alternative 2016–17 standard business tariff.

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

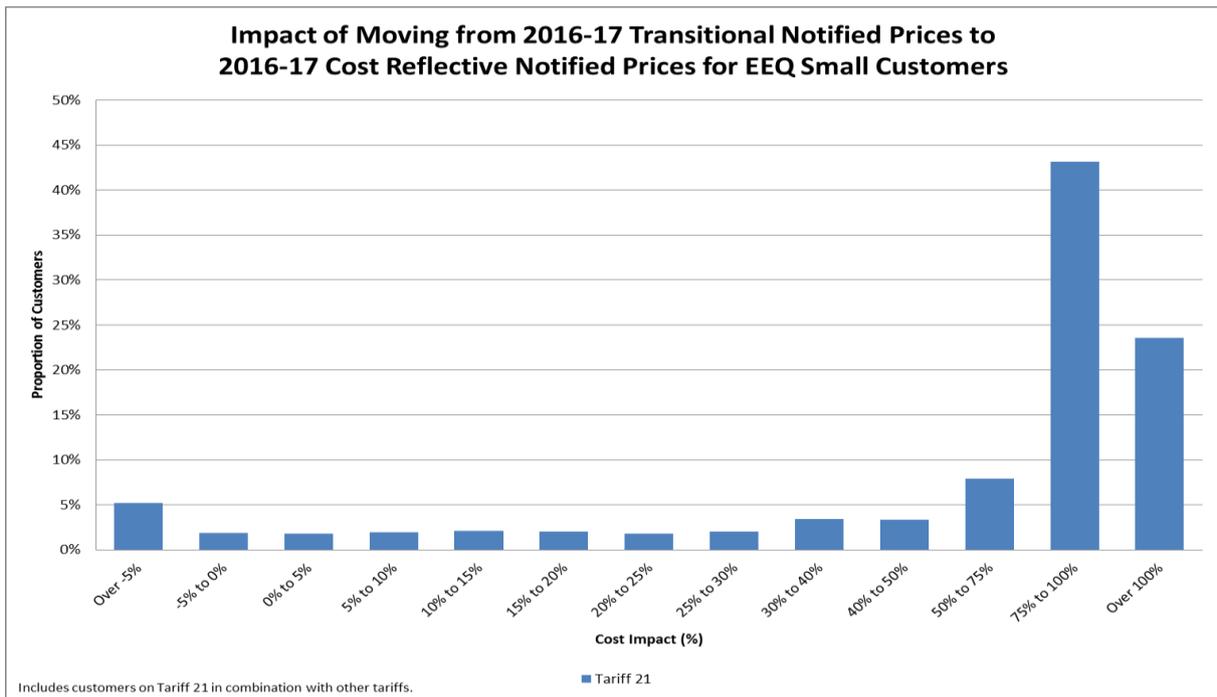
Tariff 21 is a declining block tariff that aligns with tariff 20 for small business customers. Figures 19 to 20 below show the distribution of potential impacts for existing customers moving to standard business tariffs.

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



Source: Ergon Retail.

Figure 20 Change in electricity bills for small business customers on tariff 21 moving to tariff 22A

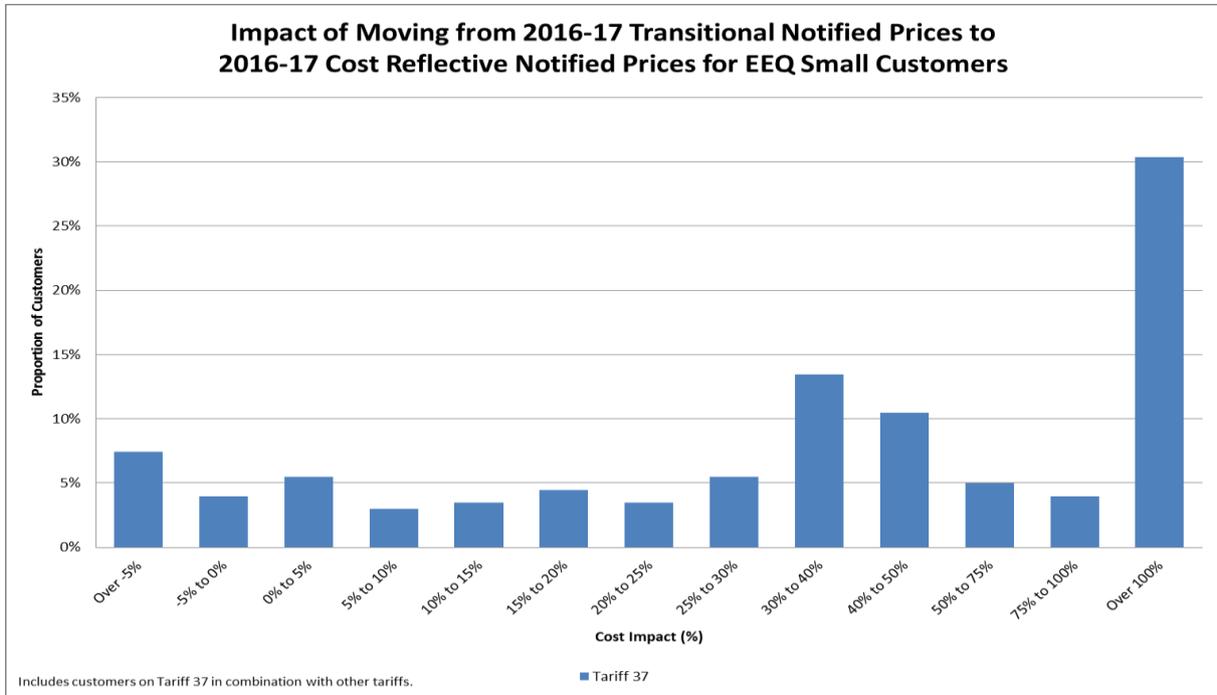


Source: Ergon Retail. Assumes 10%/90% peak/off peak split.

Tariff 37

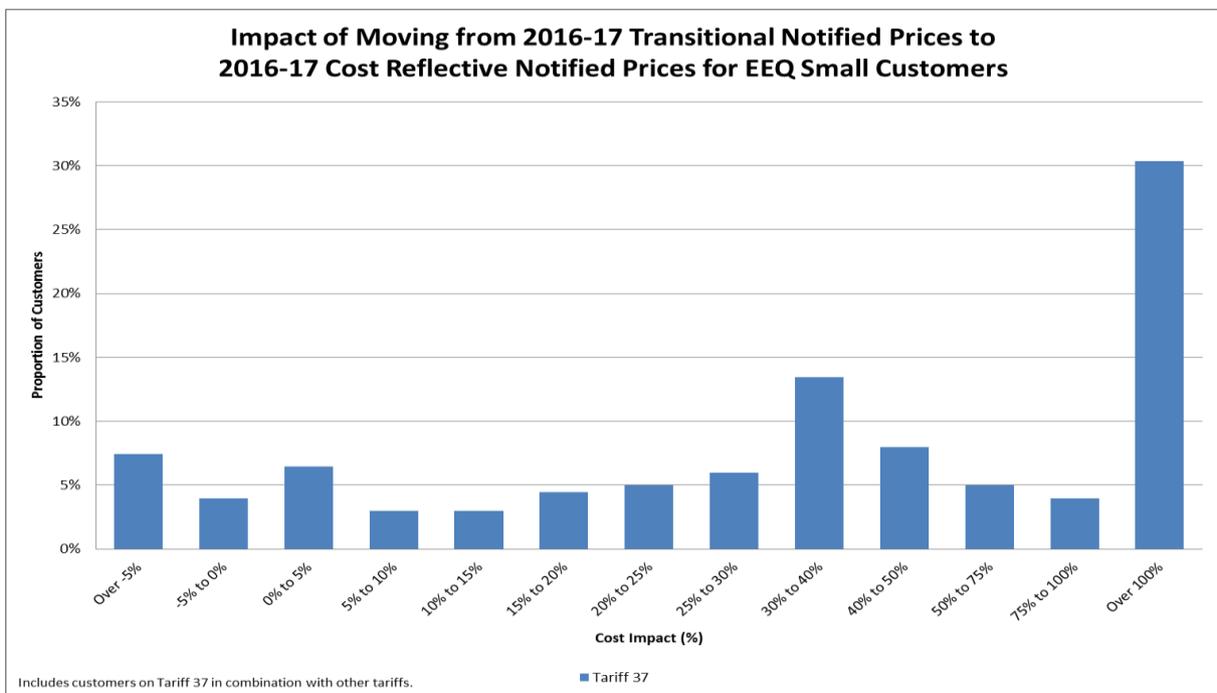
Tariff 37 is a business time-of-use tariff that aligns with tariff 20 or 22A for small business customers and one of tariffs 44 to 53 for large business customers. Figures 21 to 23 below show the distribution of potential impacts for existing customers moving to these standard business tariffs.

Figure 21 Change in electricity bills for small business customers on tariff 37 moving to tariff 20



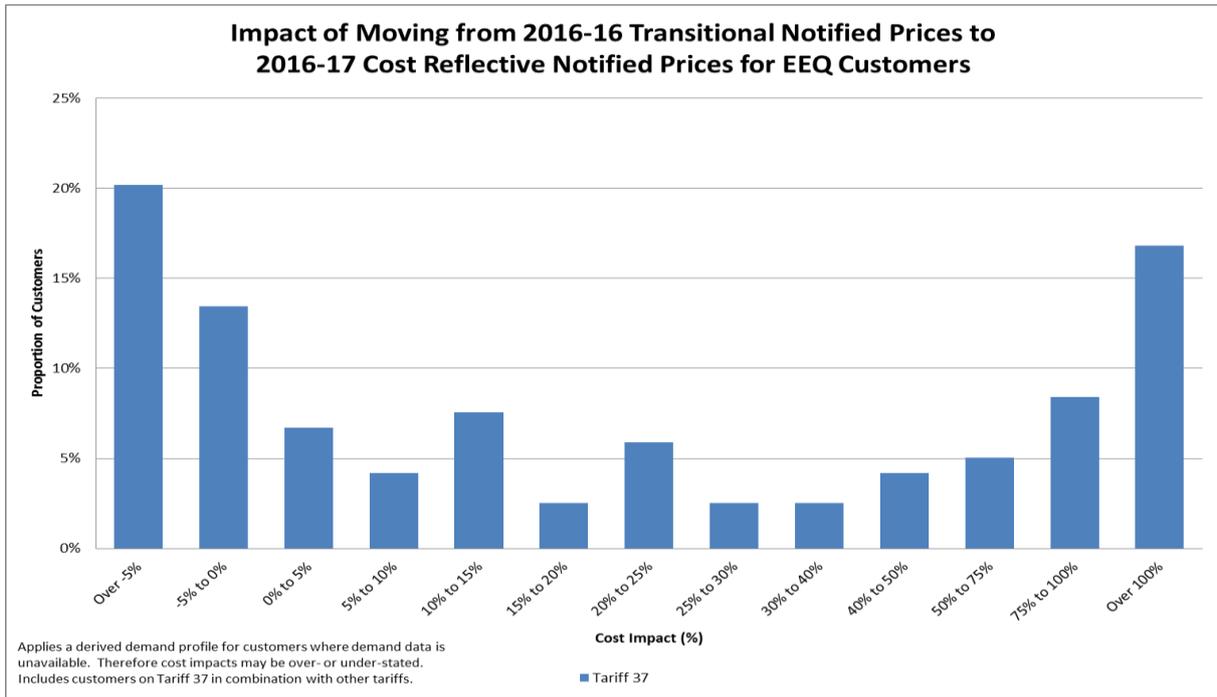
Source: Ergon Retail.

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



Source: Ergon Retail. Assumes 10%/90% peak/off peak split.

Figure 23 Change in electricity bills for large business customers on tariff 37 moving to large customer standard business tariffs

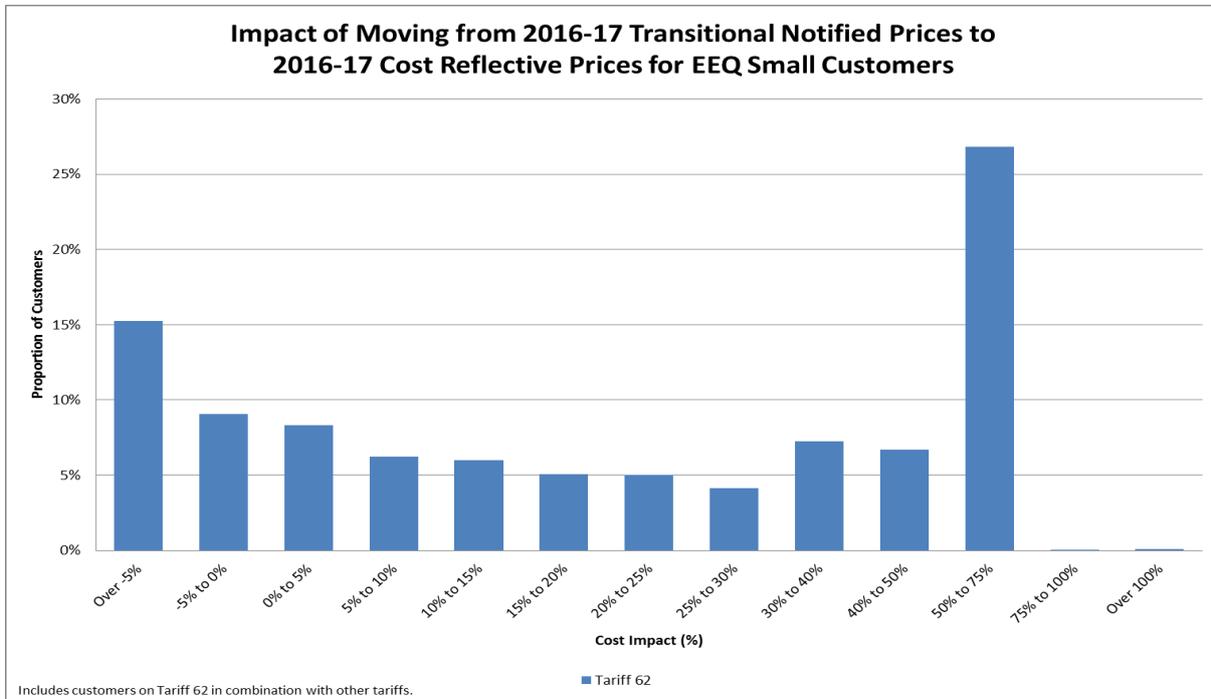


Source: Ergon Retail.

Tariffs 62 and 65

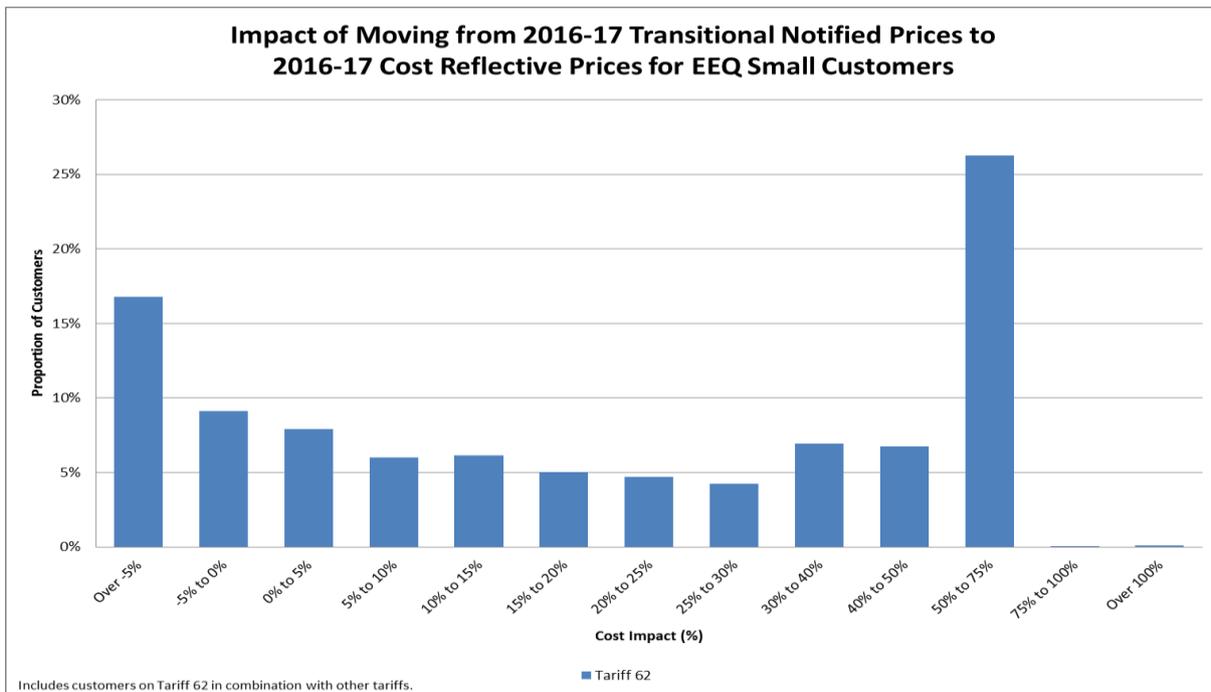
Tariffs 62 and 65 are time-of-use tariffs for farming and irrigation customers. These tariffs align with tariff 20 or 22A for small business customers and tariffs 44 and 45 for large business customers. Figures 24 to 29 below show the distribution of potential impacts for existing customers moving to these standard business tariffs.

Figure 24 Change in electricity bills for small business customers on tariff 62 moving to tariff 20



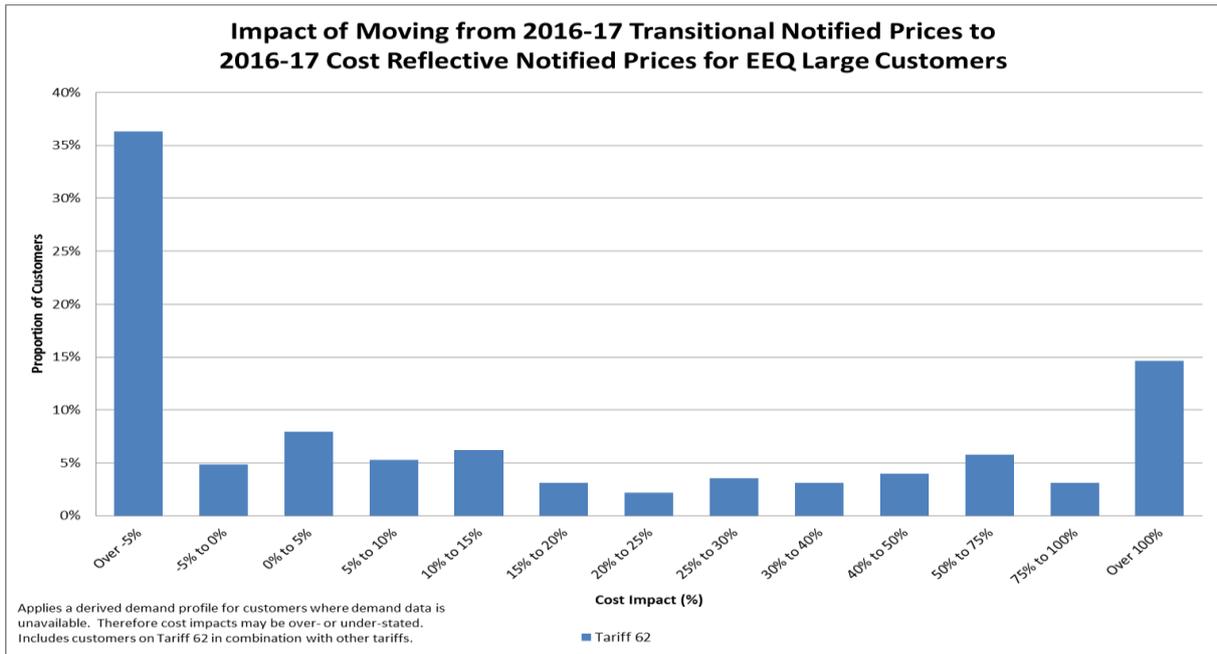
Source: Ergon Retail.

Figure 25 Change in electricity bills for small business customers on tariff 62 moving to tariff 22A



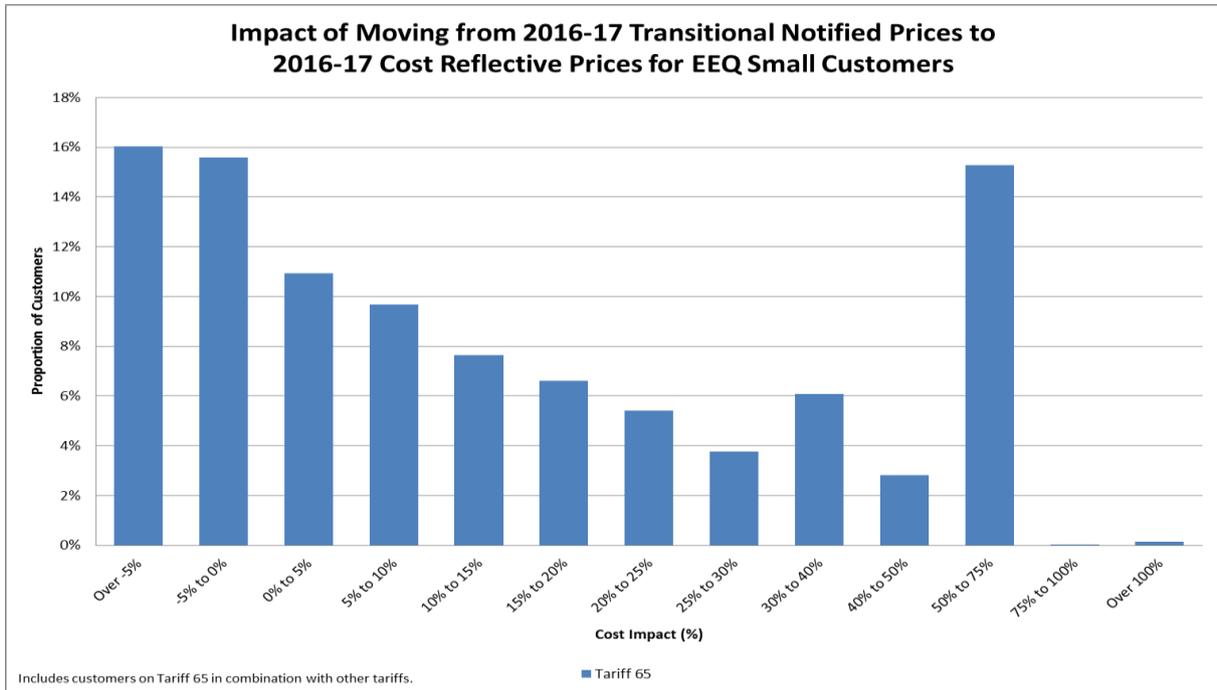
Source: Ergon Retail. Assumes 10%/90% peak/off peak split.

Figure 26 Change in electricity bills for large business customers on tariff 62 moving to large customer standard business tariffs



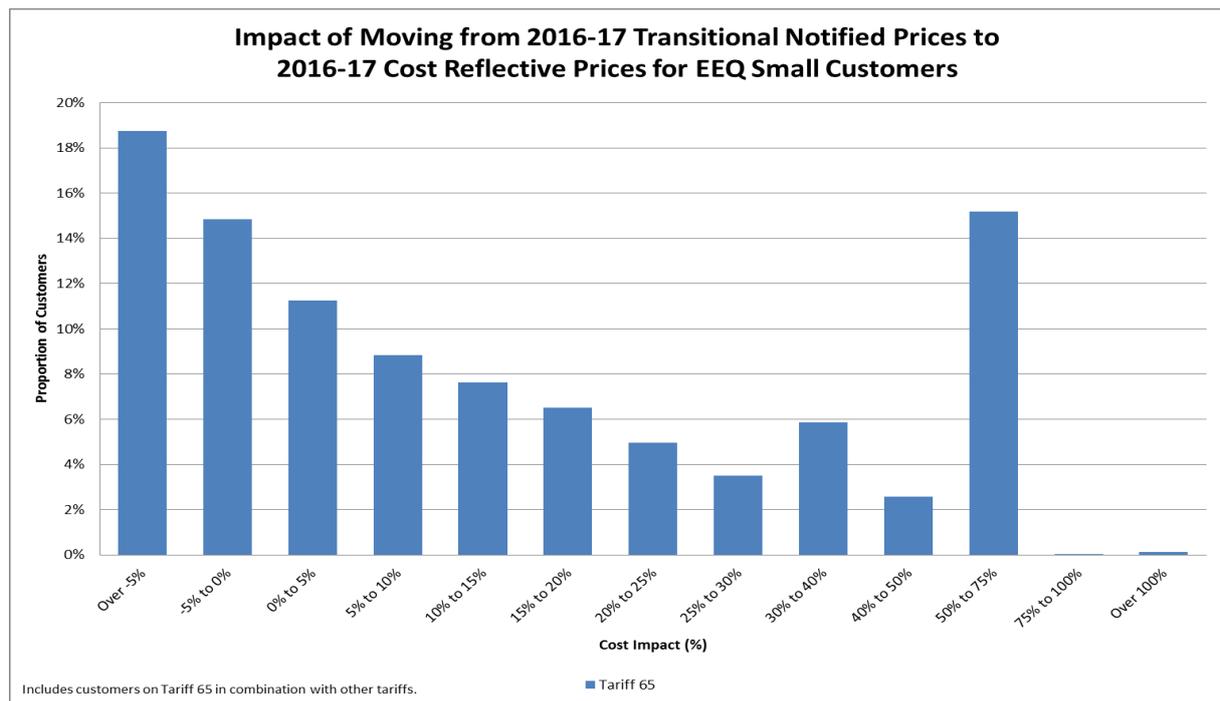
Source: Ergon Retail.

Figure 27 Change in electricity bills for small business customers on tariff 65 moving to tariff 20



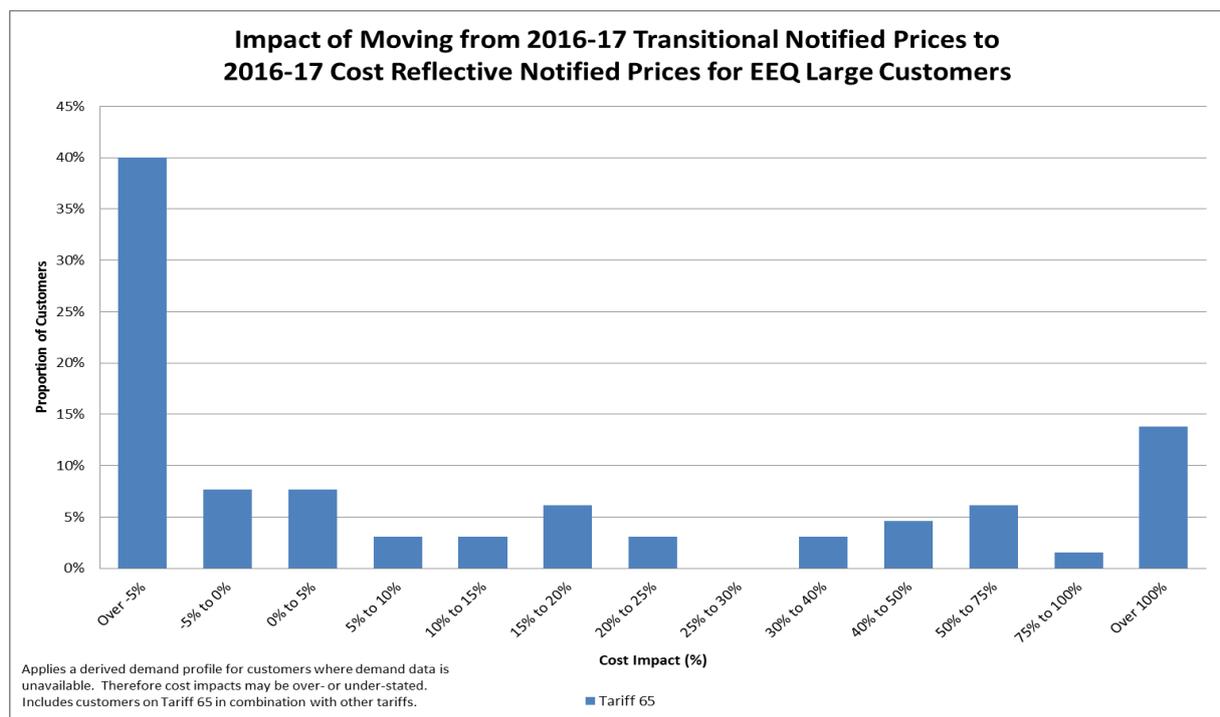
Source: Ergon Retail.

Figure 28 Change in electricity bills for small business customers on tariff 65 moving to tariff 22A



Source: Ergon Retail. Assumes 10%/90% peak/off peak split.

Figure 29 Change in electricity bills for large business customers on tariff 65 moving to large customer standard business tariffs

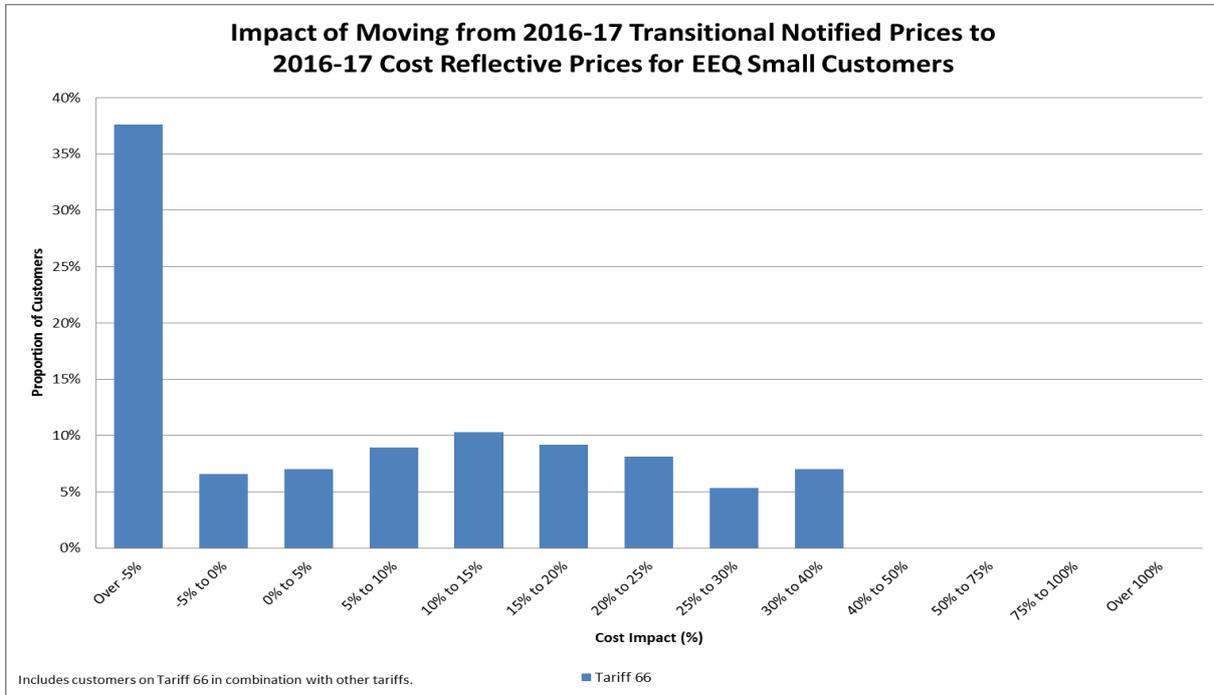


Source: Ergon Retail.

Tariff 66

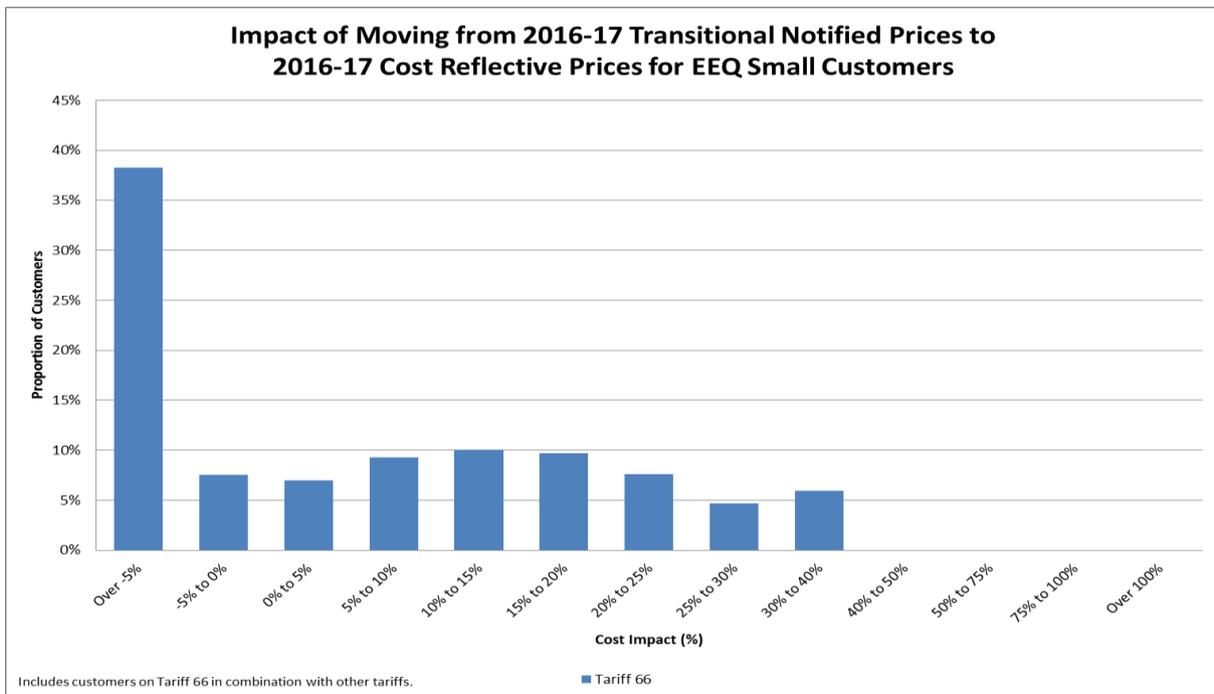
Tariff 66 is a flat-rate tariff for irrigation customers. This tariff aligns with tariff 20 or 22A for small business customers and tariffs 44 and 45 for large business customers. Figures 30 to 32 below show the distribution of potential impacts for existing customers moving to these standard business tariffs.

Figure 30 Change in electricity bills for small business customers on tariff 66 moving to tariff 20



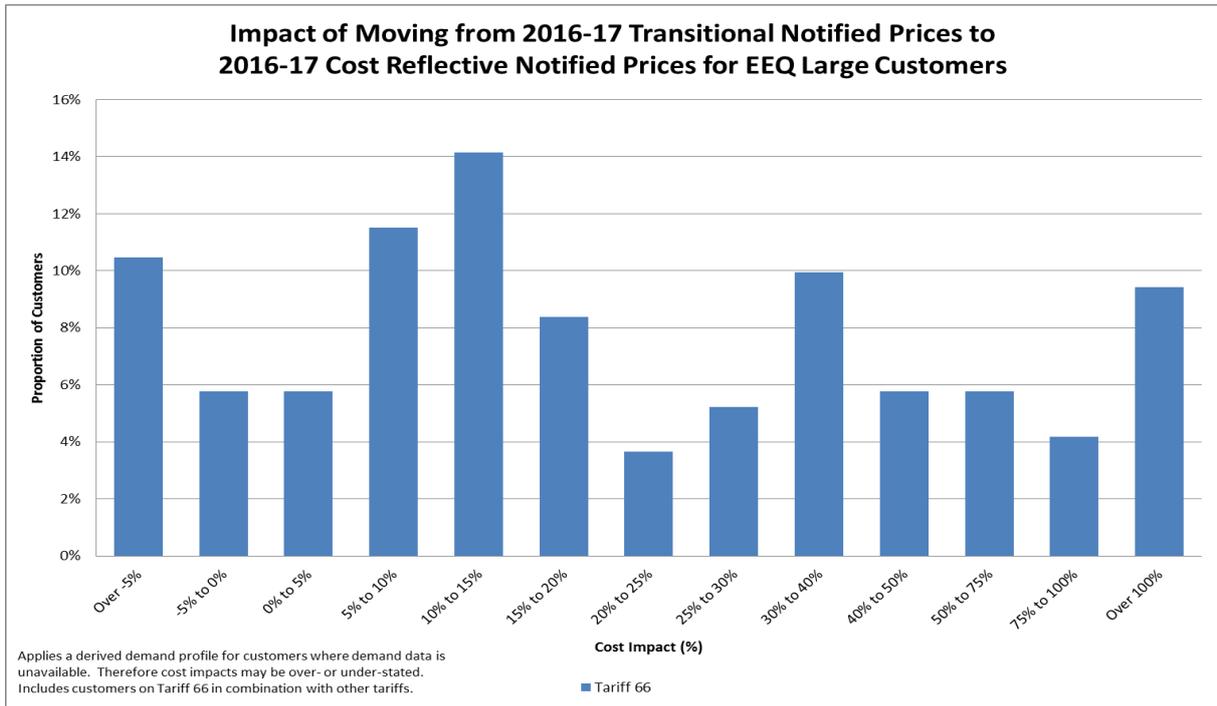
Source: Ergon Retail.

Figure 31 Change in electricity bills for small business customers on tariff 66 moving to tariff 22A



Source: Ergon Retail. Assumes 10%/90% peak/off peak split.

Figure 32 Change in electricity bills for large business customers on tariff 66 moving to large customer standard business tariffs



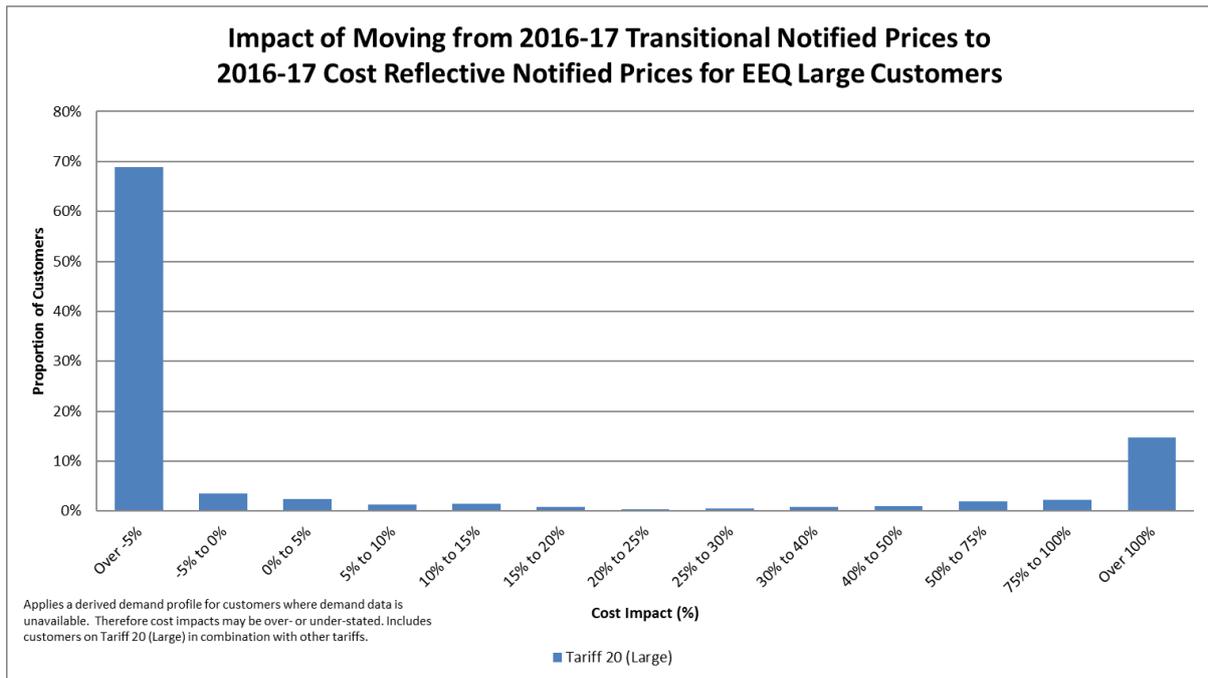
Source: Ergon Retail.

Large business customer tariffs

Tariffs 20 (large) and 22 (small and large)

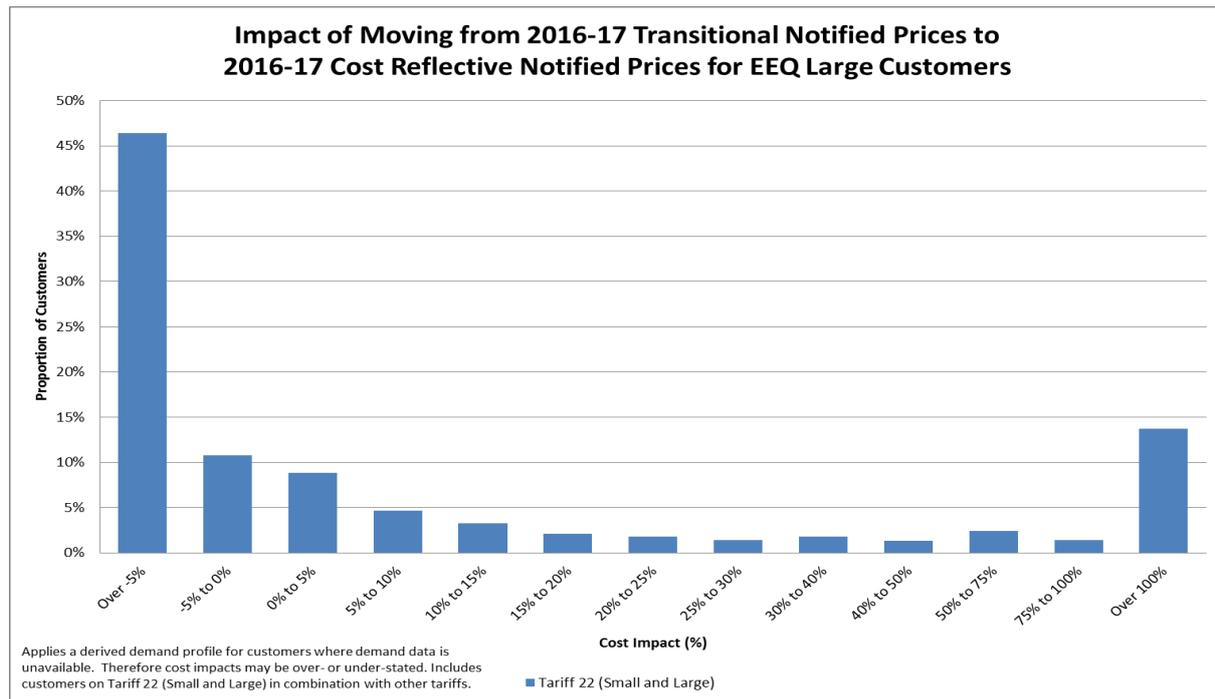
Transitional large tariffs 20 (large) and 22 (small and large) align with tariffs 44 to 53, which are based on Ergon Energy network tariffs and charges. Figures 33 and 34 show the likely impacts for large business customers moving from these transitional tariffs to the most appropriate of the standard large business customer tariffs.

Figure 33 Change in electricity bills for business customers on tariff 20 (large) moving to large customer standard business tariffs



Source: Ergon Retail.

Figure 34 Change in electricity bills for business customers on tariff 22 (small and large) moving to large customer standard business tariffs

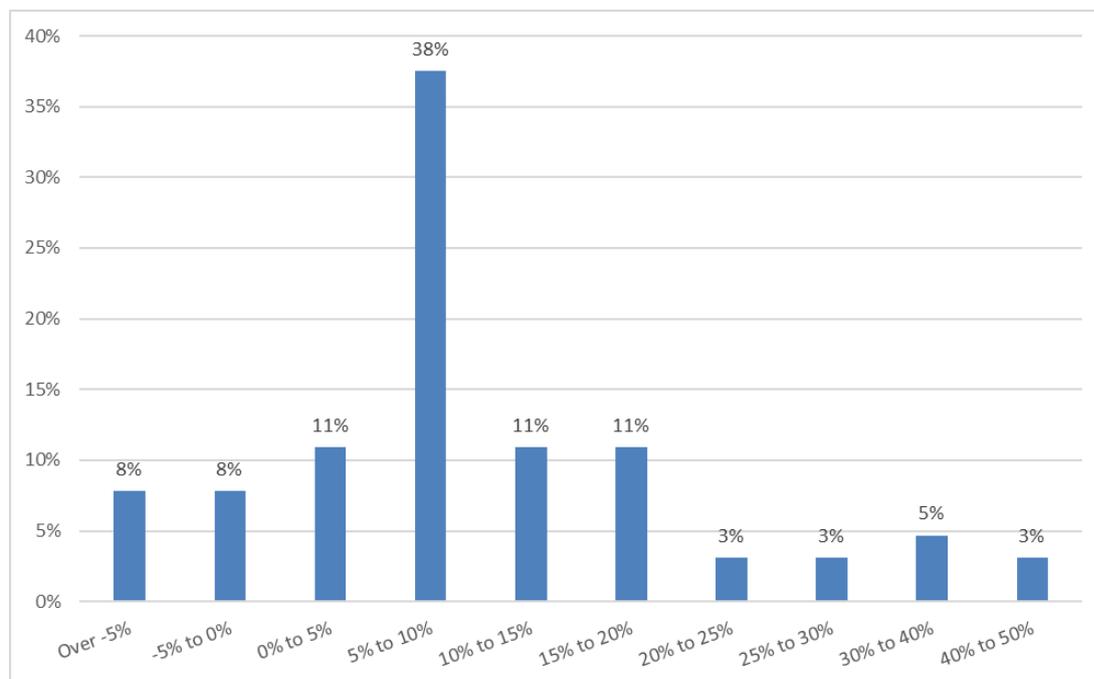


Source: Ergon Retail.

Tariffs 47 and 48

Transitional very large tariffs 47 and 48 align with tariffs 51A–D, 52A–C and 53, which are based on Ergon Energy network tariffs and charges. Figure 35 shows the likely impacts for large business customers moving from transitional tariffs 47 and 48 to the most appropriate standard business tariffs.

Figure 35 Estimated bill impact for customers moving from tariffs 47 and 48 to standard business tariffs



Source: Ergon Retail.

APPENDIX G: GAZETTE NOTICE

Note: all drought assistance provisions have been removed from the 2017–18 gazette notice by DEWS. We understand the drought assistance policy will remain in place and will be published in a separate gazette notice by DEWS.

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 and section 22A, Division 12A of Part 2 of the National Energy Retail Law (Queensland) (the NERL (Qld)).

Pursuant to the Certificate of Delegation from the Minister for Energy, Biofuels and Water Supply (dated 10 November 2016) and sections 90 and 90AB of the Electricity Act, I hereby state that the Queensland Competition Authority decided that, on and from 1 July 2017, the notified prices are the applicable prices set out in the attached Tariff Schedule.

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 16th day of June 2017.

Roy Green, Chairman
Queensland Competition Authority

TARIFF SCHEDULE

Part 1

APPLICATION

A) APPLICATION OF THIS SCHEDULE – GENERAL

This Tariff Schedule replaces the Tariff Schedule published in the Queensland Government Gazette on 31 May 2016.

This Tariff Schedule applies to all Standard Contract Customers in Queensland in the Ergon Energy distribution area.

Definitions of customers and their types are those set out in the Electricity Act and the NERL(Qld). Unless otherwise defined, the terminology used in this Tariff Schedule is intended to be consistent with the energy laws.

B) APPLICATION OF TARIFFS

General

Distribution entities may have specific eligibility criteria in addition to retail tariff eligibility requirements set out in the Tariff Schedule, e.g. the types of loads and how they are connected to interruptible supply tariffs. Retailers will advise customers of any applicable distribution entity requirements upon tariff assignment or customer request.

Additional customer descriptions:

- *Farming* is the undertaking of agricultural or associated business activities for the primary purpose of profit. The primary use of electricity supplied under a farming tariff should be for farming.
- *Irrigation* is the undertaking of pumping water for farming. The primary use of electricity supplied under an irrigation tariff should be for irrigation.
- A *Connection Asset Customer (CAC)* is a large business customer whose required capacity generally exceeds 1500 kVA and annual energy usage generally exceeds 4GWh as classified by the distribution entity.
- An *Individually Calculated Customer (ICC)* is a large business customer whose annual energy usage generally exceeds 40GWh as classified by the distribution entity.

CAC or ICC customers can only access tariffs where specifically stated in the tariff description, or as agreed by the retailer.

MI means the unique identification number applicable to the point at which a premises is connected to a distribution entity's network. For premises connected to the National Electricity Market this is the National Metering Identifier (NMI), and for other premises is the unique identifier allocated by the distribution entity.

An *MI exclusive* tariff cannot be used in conjunction with any other tariff at that MI. All large customer continuous supply tariffs are MI exclusive tariffs unless otherwise stated.

A *primary* tariff is the tariff that reflects the principal purpose of use of electricity at the premises or the majority of the load, and is capable of existing by itself against a MI.

Small business customers can access primary residential tariffs providing the nature of all use on the tariff is consistent with the tariff requirements (refer below for *concessional application* of primary residential tariffs), and is in conjunction

with a primary business tariff (Tariff 20, 21, 22, 22A, 24, 41, 62, 65 or 66) at the same MI.

Primary residential tariffs are also applicable to electricity used in separately metered common sections of residential premises consisting of more than one living unit, but cannot be used in conjunction with another primary residential tariff at the same MI.

A *secondary* tariff is any tariff that is not a primary tariff, and can be accessed only when it is in conjunction with a primary tariff at the same MI unless otherwise stated.

A *seasonal* tariff is any tariff for which charges vary depending on the month the charge applies. Seasonal tariffs can also include time-of-use based charges.

A *time-of-use* tariff is any tariff for which charges vary depending on the time of day.

A *transitional* tariff can be accessed by eligible customers for a limited period of time.

An *obsolete* tariff can only be accessed by customers who: (a) are on the tariff at the date it becomes obsolete; and (b) take continuous supply under it.

Transitional and obsolete tariffs will be discontinued no later than the *scheduled phase-out date*. Customers on these tariffs may opt to transfer at any time to applicable standard tariffs.

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

Weekdays mean Monday to Friday including public holidays.

Summer is the months of December to February inclusive.

A *daily supply charge* is a fixed amount charged to cover the costs of maintaining electricity supply to a premises, including the costs associated with the provision of equipment (excluding metering and associated services) and general administration. Retailers may use different terms for this charge, for example: Service Charge, Service Fee, Service to Property Charge etc.

A *minimum daily payment* only applies when usage charges for the billing period are less than the total of the minimum daily payment multiplied by the number of days in the billing period. Where the total minimum daily payment is charged, usage charges will not apply.

A *connection charge* reflects the value of the customer's dedicated connection assets and whether these assets were paid for upfront by the customer. The number of connection units allocated to an MI is as advised by the distribution entity.

Demand is the average rate of use of electricity over a 30-minute period as recorded in kilowatts (kW) on the associated metering, or as calculated in kilovolt-amperes (kVA) using data recorded on the associated metering. No adjustment to import demand is made for export to the distribution network.

Maximum demand is highest demand during the charging period of the particular tariff as identified by the tariff description. Unless otherwise stated, the maximum demand is the value on which demand charges are based.

A *demand threshold* is the demand value below which demand charges do not apply for billing purposes. Where

a demand threshold applies, the chargeable demand is the greater of the maximum demand less the demand threshold, or zero.

Authorised demand is the maximum demand permitted to be imported from, or exported to the network, and is specific to each MI. The value is generally established by agreement between the customer and distribution entity.

Capacity is a demand-based measure of the network supply capability reserved for a customer. Unless otherwise stated, the capacity charge is the greater of the authorised demand, or actual maximum demand.

Reactive demand is the average rate of use of electricity over a 30-minute period as recorded in kilovolt-amperes reactive (kVAr) on the associated metering.

Permissible reactive demand for an MI is determined by applying its compliant power factor (as set out by the National Energy Rules) to its authorised demand.

Excess reactive demand (also known as excess reactive power) charges are the greater of the reactive demand occurring at the time of the maximum demand, less the permissible reactive demand, or zero.

Bus customers are those taking supply via direct connection to the distribution entity's zone substation or similar as advised by the distribution entity.

Line customers are those taking supply via direct connection to the distribution entity's high voltage electrical wires, cabling, or similar as advised by the distribution entity.

Revenue metering is metering used for billing purposes. Appropriate revenue metering must be in place for each tariff at a MI. If a change to the customer's revenue metering is required to support the applicability of a tariff to a customer, the customer may request the retailer to install the required metering at the customer's cost.

From 1 July 2015, charges for metering and associated services are no longer included in notified prices. Metering charges will now be applied in addition to the notified prices contained in this Tariff Schedule.

The *metrology procedure* is issued by the Australian Energy Market Operator as varied by the Electricity Distribution Network Code.

Tariff changes

Customers previously supplied under tariffs which have been discontinued or redesignated (whether by number, letter or name) will be supplied under other tariffs appropriate to their installations.

Customers on seasonal and/or transitional time-of-use tariffs cannot change to another tariff less than one year from the application of the tariff to the customer's account without the retailer's agreement unless expressly allowed or permitted by energy law.

Prorating of charges on bills

Where appropriate, charges on bills will be calculated on a pro rata basis having regard to the number of days in the billing cycle that supply was connected as expressly allowed or permitted by energy law. Retailers can advise customers of which charges on their bills are subject to prorating, and the methodology used.

Supply voltage

Tariffs in this Schedule can only be accessed by customers taking supply at *low voltage* as set out in the

Electricity Regulation 2006 unless it is a designated high voltage tariff, or otherwise agreed with the retailer.

Where supply is given and metered at high voltage and the tariff applied is not a designated high voltage tariff, 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 33kV; or
- 8 percent of the calculated tariff charge where supply is given at voltages of 66kV and above,

provided that the calculated tariff charge after application of the credit is not less than the Minimum Payment or other minimum charge calculated by applying the provisions of the applied tariff.

Card-operated meter customers

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 the relevant local government authority on behalf of the customer, and 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.

Residential customers with card-operated meters can access Tariff 11 as their primary tariff, and Tariffs 31 and 33 as secondary tariffs.

Small business customers with card-operated meters can access Tariff 20 as their primary tariff.

Charges will be those as set out in Part 2 for the particular tariff.

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**
- (c) financial institution fee for a dishonoured payment:
 - a maximum of **the fee incurred by the retailer**

Concessional application

Tariffs 11, Tariff 12A and Tariff 14 are also available to customers where they satisfy the additional criteria set out in any one of 1, 2 or 3, below:

1. Separately metered installations where all electricity used is 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.
2. Residential institutions:
 - (a) where 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; and

- (b) that are:
- (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*.
3. Organisations providing support and crisis accommodation which:
- (a) meet the eligibility criteria of the Specialist Homelessness Services administered by the State Department of Housing and Public Works; and
 - (b) are 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 2

STANDARD TARIFFS

A) SMALL CUSTOMER TARIFFS

Continuous supply tariffs

Tariff 11

This is a residential flat-rate primary tariff.

Usage:	25.890 c/kWh
Daily supply charge:	87.133 c

Tariff 12A

This is a residential seasonal time-of-use primary tariff.

Usage:	
Summer	
<i>Peak</i>	
3:00pm to 9:30pm	61.137 c/kWh
<i>Off-peak</i>	
All other times	21.070 c/kWh
All other times	21.070 c/kWh
Daily supply charge:	89.848 c

Tariff 14

This is a residential seasonal time-of-use monthly demand primary tariff.

Daily demand is the average of the 13 half-hourly demand recordings for each day from 3:00pm to 9:30pm for the *Peak* period (Summer) and the *Off-peak* period (all other times).

Peak chargeable demand is the average of the four highest peak daily demands in the month.

Off-peak chargeable demand is the greater of the average of the four highest off-peak daily demands in the month, or 3kW.

Chargeable demand:	
<i>Peak</i>	\$65.818 per kW
<i>Off-peak</i>	\$9.931 per kW
Usage:	17.430 c/kWh
Daily supply charge:	45.749 c

Tariff 20

This is a small business flat-rate primary tariff.

Usage:	27.718 c/kWh
Daily supply charge:	120.499 c

Tariff 22A

This is a small business seasonal time-of-use primary tariff.

Usage:	
Summer	
<i>Peak</i>	
10:00am to 8:00pm weekdays	57.195 c/kWh
<i>Off-peak</i>	
All other times	23.871 c/kWh
All other times	23.871 c/kWh
Daily supply charge:	120.499 c

Tariff 24

This is a small business seasonal time-of-use monthly demand primary tariff.

Daily demand is the average of the 20 half-hourly demand recordings for each weekday from 10:00am to 8:00pm for the *Peak* period (Summer) and the *Off-peak* period (all other times).

Peak chargeable demand is the average of the four highest peak daily demands in the month.

Off-peak chargeable demand is the greater of the average of the four highest off-peak daily demands in the month, or 3kW.

Chargeable demand:	
<i>Peak</i>	\$101.553 per kW
<i>Off-peak</i>	\$10.721 per kW
Usage:	18.871 c/kWh
Daily supply charge:	63.289 c

Tariff 41

This is a small business monthly demand primary tariff.

Demand:	\$26.211 per kW
Usage:	16.144 c/kWh
Daily supply charge:	519.079 c

Interruptible supply tariffs**General:**

These tariffs are applicable when electricity supply is:

- (a) connected to approved apparatus (e.g. pool pump) via a socket-outlet as approved by the retailer; or
- (b) permanently connected to approved apparatus (e.g. electric hot water system) as approved by the retailer (but not applicable if provision has been made to supply the apparatus under a different tariff during the supply interruption period).

The retailer will arrange the provision of load control equipment on a similar basis to provision of the required revenue metering.

Tariff 31

This is a small customer flat-rate secondary tariff with interruptible supply.

Supply will be available for a minimum of 8 hours per day, but 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.

In addition to the *general* requirements above, this tariff is also applicable when electricity supply is permanently connected to approved specified parts of apparatus (e.g. hot water system booster heating unit), as approved by the retailer, but not applicable if provision has been made to supply the specified part under a different tariff during the supply interruption period except as agreed by the retailer (e.g. for a one-shot booster for a solar hot water system), in which case it must be metered under and charged at the primary tariff of the premises concerned, or if more than one primary tariff exists, the tariff applicable to general power usage at the premises.

Usage:	15.776 c/kWh
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Tariff 33

This is a small customer flat-rate secondary tariff with interruptible supply.

Supply will be available for a minimum of 18 hours per day, but times when supply is available is subject to variation at the absolute discretion of the distribution entity.

In addition to the *general* requirements above, this tariff is also applicable as a primary tariff at the absolute discretion of the retailer.

This tariff shall not apply in conjunction with Tariff 24.

Usage:	20.482 c/kWh
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B) LARGE CUSTOMER TARIFFS**Tariff 44**

This is a large business monthly demand primary tariff.

Demand threshold:	30 kW
Chargeable demand:	\$37.763 per kW
Usage:	14.791 c/kWh
Daily supply charge:	4966.937 c

Tariff 45

This is a large business monthly demand primary tariff.

Demand threshold:	120 kW
Chargeable demand:	\$28.451 per kW
Usage:	14.791 c/kWh
Daily supply charge:	16166.008 c

Tariff 46

This is a large business monthly demand primary tariff.

Demand threshold:	400 kW
Chargeable demand:	\$23.288 per kW
Usage:	14.769 c/kWh
Daily supply charge:	42193.294 c

Tariff 50

This is a large business seasonal time-of-use monthly demand primary tariff.

Peak is Summer, being 10:00am to 8:00pm on Summer weekdays for determining chargeable demand, and all day each day for usage. *Off-peak* is all times in non-summer months for determining chargeable demand and usage.

Peak

Demand threshold:	20 kW
Chargeable demand:	\$63.640 per kW
Usage:	14.346 c/kWh

Off-peak

Demand threshold:	40 kW
Chargeable demand:	\$11.597 per kW
Usage:	17.129 c/kWh
Daily supply charge:	4060.474 c

Tariff 51 suite**General:**

These are large business high-voltage monthly demand primary tariffs only for customers classified as CAC supplied as indicated.

Tariff 51A

Customers supplied at 66kV.

Demand:	\$2.784 per kVA
Capacity:	\$4.714 per kVA
Excess reactive demand:	\$4.454 per kVAr
Usage:	14.223 c/kWh
Connection charge:	\$10.523 per day/unit
Daily supply charge:	26181.332 c

Tariff 51B

Customers supplied at 33kV.

Demand:	\$2.784 per kVA
Capacity:	\$5.632 per kVA
Excess reactive demand:	\$4.454 per kVAr
Usage:	14.223 c/kWh
Connection charge:	\$10.523 per day/unit
Daily supply charge:	19356.332 c

Tariff 51C

Customers supplied on an 11 or 22kV bus.

Demand:	\$3.452 per kVA
Capacity:	\$6.475 per kVA
Excess reactive demand:	\$4.454 per kVAr
Usage:	14.227 c/kWh
Connection charge:	\$10.523 per day/unit
Daily supply charge:	17886.332 c

Tariff 51D

Customers supplied on an 11 or 22kV line.

Demand:	\$6.903 per kVA
Capacity:	\$12.599 per kVA
Excess reactive demand:	\$4.454 per kVAr
Usage:	14.244 c/kWh
Connection charge:	\$10.523 per day/unit
Daily supply charge:	17046.332 c

Tariff 52 suite**General:**

These are large business high-voltage seasonal time-of-use monthly demand primary tariffs only for customers classified as CAC supplied as indicated.

Chargeable demand is the maximum demand between 10:00am and 8:00pm Summer weekdays.

Chargeable capacity excludes all demands occurring during the chargeable demand periods.

Tariff 52A

Customers supplied at 33 or 66kV.

Chargeable demand:	\$12.248 per kVA
Chargeable capacity:	\$7.477 per kVA
Excess reactive demand:	\$4.454 per kVAr
Usage:	
Summer:	13.666 c/kWh
All other times:	14.112 c/kWh
Connection charge:	\$10.523 per day/unit
Daily supply charge:	13581.332 c

Tariff 52B

Customers supplied on an 11 or 22kV bus.

Chargeable demand:	\$44.093 per kVA
Chargeable capacity:	\$5.250 per kVA
Excess reactive demand:	\$4.454 per kVAr
Usage:	
Summer:	13.671 c/kWh
All other times:	14.116 c/kWh
Connection charge:	\$10.523 per day/unit
Daily supply charge:	13581.332 c

Tariff 52C

Customers supplied on an 11 or 22kV line.

Chargeable demand:	\$80.540 per kVA
Chargeable capacity:	\$9.704 per kVA
Excess reactive demand:	\$4.454 per kVAr
Usage:	
Summer:	13.687 c/kWh
All other times:	14.133 c/kWh
Connection charge:	\$10.523 per day/unit
Daily supply charge:	13581.332 c

Tariff 53

This is a large business high-voltage primary tariff only for customers classified as ICC.

Demand:	\$6.903 per kVA
Capacity:	\$12.599 per kVA
Excess reactive demand:	\$4.454 per kVAr
Usage:	14.244 c/kWh
Daily supply charge:	17046.332 c

Part 3**TRANSITIONAL AND OBSOLETE TARIFFS****Tariff 20 (large)**

This is a transitional large business flat-rate primary tariff.

This tariff cannot be accessed by small customers.

Scheduled phase-out date:	1 July 2020
Usage:	37.595 c/kWh
Daily supply charge:	76.858 c

Tariff 21

This is a transitional business declining-block primary tariff.

This tariff shall not apply in conjunction with Tariff 20, 22, 22A, 24 or 62.

Scheduled phase-out date:	1 July 2020
Usage:	
First 100 kWh/month	49.357 c/kWh
Next 9,900 kWh/month	46.374 c/kWh
All remaining usage	35.303 c/kWh
Minimum daily payment:	72.631 c

Tariff 22 (small and large)

This is a transitional business time-of-use primary tariff.

Scheduled phase-out date:	1 July 2020
Usage:	
<i>Peak</i>	
7:00am to 9:00pm weekdays	49.820 c/kWh
<i>Off-peak</i>	
All other times	17.543 c/kWh
Daily supply charge:	184.717 c

Tariff 37

This is an obsolete business time-of-use primary tariff.

This tariff is applicable when electricity supply is permanently connected to approved apparatus (e.g. electric storage hot water system, apparatus for the production of steam) as approved by the retailer.

Scheduled phase-out date:	1 July 2020
Usage:	
<i>Peak</i>	
4:30pm to 10:30pm	54.544c/kWh
<i>Off-peak</i>	
All other times	21.807c/kWh
Minimum daily payment:	30.623 c

Tariff 47

This is an obsolete large business high voltage monthly demand primary tariff.

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.

Scheduled phase-out date:	1 July 2022
Demand threshold:	400 kW
Chargeable demand:	\$27.864 per kW
Usage:	12.446 c/kWh
Daily supply charge:	44689.726 c

Tariff 48

This is an obsolete large business high voltage monthly demand primary tariff only for customers classified as CAC or ICC.

Scheduled phase-out date:	1 July 2022
Demand threshold:	400 kW
Chargeable demand:	\$28.822 per kW
Usage:	12.874 c/kWh
Daily supply charge:	46712.140 c

Tariff 62

This is a transitional farming business time-of-use declining-block primary tariff.

This tariff shall not apply in conjunction with Tariff 20, 21, 22, 22A or 24.

Scheduled phase-out date:	1 July 2020
Usage:	
<i>Peak</i>	
7:00am to 9:00pm weekdays	
First 10,000 kWh/month	46.516 c/kWh
All remaining usage	39.336 c/kWh
<i>Off-peak</i>	
All other times	16.448 c/kWh
Daily supply charge:	78.451 c

Tariff 65

This is a transitional irrigation business time-of-use primary tariff.

The *daily pricing period* is a fixed 12-hour period as agreed between the retailer and the customer from the range 7.00am to 7.00pm; 7.30am to 7.30pm; or 8.00am to 8.00pm Monday to Sunday inclusive.

No alteration to the agreed daily pricing period is permitted until a period of twelve months has elapsed from the previous selection.

Scheduled phase-out date: 1 July 2020

Usage:

Peak

Daily pricing period **36.894 c/kWh**

Off-peak

All other times **20.321 c/kWh**

Daily supply charge: **78.003 c**

Tariff 66

This is a transitional irrigation business fixed annual dual-rate demand primary tariff.

The annual fixed charge is determined by the connected motor capacity used for irrigation pumping.

Any customer taking supply under this tariff who requests a temporary disconnection will not be reconnected unless an amount equivalent to the fixed charge that would have otherwise applied corresponding to the period of disconnection, has been paid.

Scheduled phase-out date: 1 July 2020

Fixed charge (annual):

First 7.5 kW **\$37.503 per kW**

Remaining kW **\$112.759 per kW**

Usage: **19.338 c/kWh**

Daily supply charge: **171.915 c**

Part 4**UNMETERED SUPPLY TARIFFS****Tariff 71**

This is a business flat-rate primary tariff for street lighting.

Street lighting customers as defined in Queensland legislative instruments, are State or local government agencies for street lighting loads.

Street lights are deemed to illuminate the following types of roads:

- *Local government* controlled roads comprising land that is:
 - (a) dedicated to public use as a road; or
 - (b) 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
 - (c) a footpath or bicycle path; or
 - (d) a bridge, culvert, ford, tunnel or viaduct, and excludes State-controlled roads and public thoroughfare easements; and
- *State-controlled roads* declared as such under the *Transport Infrastructure Act 1994* (Qld).

All usage will be determined in accordance with the metrology procedure.

Usage: **32.025 c/kWh**

Daily supply charge: **0.525 c/lamp**

Tariff 91

This is a business flat-rate primary tariff.

It is available only to customers with small loads other than street lights as approved by the retailer, and applies where:

- (a) the load pattern is predictable;
- (b) 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
- (c) 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 retailer.

Charges for installation, maintenance and removal of supply to an unmetered installation may apply in addition to the charge for electricity supplied. These charges are unregulated.

Usage: **25.147 c/kWh**

End of Tariff Schedule

APPENDIX H: ASSUMPTIONS AND DATA USED TO DETERMINE CUSTOMER IMPACTS

Typical customer figures are based on the annual consumption of the median customer on each tariff in regional Queensland. Consistent with previous price determinations, Ergon Distribution provided the forecast usage for tariffs 12A and 22A¹⁵⁴ while Ergon Retail provided actual usage data for the remaining tariffs.

Ergon Retail advised that it was only able to provide usage data covering the period March 2015 till March 2016 as more recent data were not available due to the work program and data migration required to implement Ergon Retail's new billing system.

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 price 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.

Stakeholders noted that the typical customer figures provided by Ergon Retail appear lower than those on the AER'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 Retail uses actual consumption figures from their customer base of over 700,000 electricity customers in regional Queensland.

Table 35 Usage data used to determine customer impacts

<i>Retail tariff</i>	<i>Usage (kWh per year)</i>	<i>Peak usage (%)</i>	<i>Off-peak usage (%)</i>	<i>Demand (kW per month)</i>	<i>Demand threshold (kW per month)</i>
T11 (only)—25th percentile	2,568				
T11 (only)—median	4,173				
T11 (only)—75th percentile	6,478				
T11 (with T31)—median	4,425				
T31—median	1,774				
T11 (with T33)—median	4,134				
T33—median	1,669				
T20—median	6,776				
T12A—median	4,159	11.0	89.0		
T22A—median ^a	7,625	10.1	89.9		
T44—median	244,308			63	30

¹⁵⁴ Forecast data were provided, as actual usage data were considered unreliable due to the very small number of customers on these tariffs.

Retail tariff	Usage (kWh per year)	Peak usage (%)	Off-peak usage (%)	Demand (kW per month)	Demand threshold (kW per month)
T45–median	931,464			231	120
T46–median	2,596,788			556	400

a The substantial changes of this forecast between the 2016–17 and 2017–18 price determinations is due to Ergon Distribution refining its data set used to estimate the median usage. Ergon Distribution advised that it has updated its dataset to reflect the load characteristics of all customers, not just those customers modelled to transfer to tariff 22A.

Source: Ergon Retail and Ergon Distribution

APPENDIX I: SUMMARY OF CONCESSIONAL ARRANGEMENTS FOR ENERGY IN QUEENSLAND

Concession Name	Eligibility Criteria	Annual Amount
Electricity Rebate ^a	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), a Queensland Government Seniors Card, a Commonwealth Health Care Card, and customers who are asylum seekers.	\$329.96
Reticulated Natural Gas Rebate ^a	As for Electricity Rebate.	\$69.73
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.	\$329.96
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 once every two 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.	\$672 per year for each oxygen concentrator; \$450.03 for each kidney dialysis machine.
Drought relief from Electricity Charges Scheme	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.
Energy Savvy Families program	Ergon Energy will invite about 5,500 low-income, residential customers in 10 regional towns in Queensland to install digital meters free of charge. Expressions of interest can be lodged with Ergon Energy.	Free installation of digital meters.

^a On 1 April 2017, the Queensland Government announced that Commonwealth Health Care Card holders and asylum seekers became eligible to apply for the Electricity Rebate through their retailer. See media release 'New electricity rebate is now available to help those who need it most'.

For more information see <https://www.dews.qld.gov.au/electricity/rebates>

APPENDIX J: BUILD-UP OF NOTIFIED PRICES

Table 36 Regulated retail tariffs and prices for residential customers (GST exclusive)

<i>Retail tariff</i>	<i>Tariff component</i>	<i>Fixed^a (c/day)</i>	<i>Peak usage (c/kWh)</i>	<i>Off-peak/Flat usage (c/kWh)</i>	<i>Peak demand (\$/kW/month)</i>	<i>Off-peak/Flat demand (\$/kW/month)</i>
Tariff 11— Residential (flat-rate)	Network	47.100		9.267		
	Energy			12.939		
	Fixed retail	35.884				
	Variable retail			2.503		
	Standing offer adjustment	4.149		1.235		
	SRES cost pass-through			-0.0539		
	Total		87.133		25.890	
Tariff 12A— Residential (seasonal time- of-use)	Network	49.685	39.435	5.141		
	Energy		12.939	12.939		
	Fixed retail	35.884				
	Variable retail		5.903	2.038		
	Standing offer adjustment	4.278	2.914	1.006		
	SRES cost pass-through		-0.0539	-0.0539		
	Total		89.848	61.137	21.070	
Tariff 14— Residential (seasonal time- of-use demand)	Network	7.687		2.026	56.335	8.500
	Energy			12.939		
	Fixed retail	35.884				
	Variable retail			1.687	6.349	0.958
	Standing offer adjustment	2.179		0.833	3.134	0.473
	SRES cost pass-through			-0.0539		
	Total		45.749		17.430	65.818
Tariff 31—Night rate super economy	Network			5.547		
	Energy			8.002		
	Fixed retail					
	Variable retail			1.527		
	Standing offer adjustment			0.754		

<i>Retail tariff</i>	<i>Tariff component</i>	<i>Fixed^a (c/day)</i>	<i>Peak usage (c/kWh)</i>	<i>Off-peak/Flat usage</i>	<i>Peak demand (\$/kW/month)</i>	<i>Off-peak/Flat demand</i>
	SRES cost pass-through			-0.0539		
	Total			15.776		
Tariff 33— Controlled supply economy	Network			7.592		
	Energy			9.985		
	Fixed retail					
	Variable retail			1.981		
	Standing offer adjustment			0.978		
	SRES cost pass-through			-0.0539		
	Total				20.482	

a Charged per metering point.

Note: Totals may not add due to rounding.

Table 37 Regulated retail tariffs and prices for small business and unmetered supply customers (GST exclusive)

<i>Retail tariff</i>	<i>Tariff component</i>	<i>Fixed^a (c/day)</i>	<i>Peak usage (c/kWh)</i>	<i>Off-peak/Flat usage (c/kWh)</i>	<i>Peak demand (\$/kW/month)</i>	<i>Off-peak/Flat demand (\$/kW/month)</i>
Tariff 20– Business (flat-rate)	Network	63.900		10.510		
	Energy			12.939		
	Fixed retail	50.861				
	Variable retail			3.001		
	Standing offer adjustment	5.738		1.323		
	SRES cost pass-through			-0.0546		
	Total		120.499		27.718	
Tariff 22A– Business (seasonal time-of-use)	Network	63.900	35.398	7.262		
	Energy		12.939	12.939		
	Fixed retail	50.861				
	Variable retail		6.187	2.586		
	Standing offer adjustment	5.738	2.726	1.139		
	SRES cost pass-through		-0.0546	-0.0546		
	Total		120.499	57.195	23.871	
Tariff 24– Business (seasonal time-of-use demand)	Network	9.414		3.041	85.742	9.052
	Energy			12.939		
	Fixed retail	50.861				
	Variable retail			2.045	10.975	1.159
	Standing offer adjustment	3.014		0.901	4.836	0.511
	SRES cost pass-through			-0.0546		
	Total		63.289		18.871	101.553
Tariff 41– Business low voltage (demand)	Network	443.500		0.738		22.130
	Energy			12.939		
	Fixed retail	50.861				
	Variable retail			1.751		2.833
	Standing offer adjustment	24.718		0.771		1.248
	SRES cost pass-through			-0.0546		

<i>Retail tariff</i>	<i>Tariff component</i>	<i>Fixed^a (c/day)</i>	<i>Peak usage (c/kWh)</i>	<i>Off-peak/Flat</i>	<i>Peak demand (\$/kW/month)</i>	<i>Off-peak/Flat demand</i>
	Total	519.079		16.144		26.211
Tariff 91– Unmetered supply	Network			8.339		
	Energy			12.939		
	Fixed retail					
	Variable retail			2.724		
	Standing offer adjustment			1.200		
	SRES cost pass-through			-0.0546		
	Total				25.147	

a. Charged per metering point.

Note: Totals may not add due to rounding

Table 38 Regulated retail tariffs and prices for large business and street lighting customers (GST exclusive)

<i>Retail tariff</i>	<i>Tariff component</i>	<i>Fixed^a (c/day)</i>	<i>Peak usage (c/kWh)</i>	<i>Off-peak/Flat usage (c/kWh)</i>	<i>Peak demand (\$/kW/month)</i>	<i>Off-peak/Flat demand (\$/kW/month)</i>
Tariff 44— Business over 100 MWh/yr— Small (demand)	Network	4228.100		1.341		33.915
	Energy			11.991		
	Fixed retail	502.316				
	Variable retail			0.806		2.050
	Headroom	236.521		0.707		1.798
	SRES cost pass-through			-0.0540		
	Total		4966.937		14.791	
Tariff 45— Business over 100 MWh/yr— Medium (demand)	Network	14256.600		1.341		25.552
	Energy			11.991		
	Fixed retail	1139.598				
	Variable retail			0.806		1.544
	Headroom	769.810		0.707		1.355
	SRES cost pass-through			-0.0540		
	Total		16166.008		14.791	
Tariff 46— Business over 100 MWh/yr— Large (demand)	Network	37498.500		1.322		20.915
	Energy			11.991		
	Fixed retail	2685.590				
	Variable retail			0.805		1.264
	Headroom	2009.204		0.706		1.109
	SRES cost pass-through			-0.0540		
	Total		42193.294		14.769	
Tariff 50— Business over 100 MWh/yr (seasonal time- of-use demand)	Network	3401.000	0.941	3.441	57.155	10.415
	Energy		11.991	11.991		
	Fixed retail	466.118				
	Variable retail		0.782	0.933	3.455	0.630
	Headroom	193.356	0.686	0.818	3.030	0.552
	SRES cost pass-through		-0.0540	-0.0540		
	Total		4060.474	14.346	17.129	63.640
Tariff 71—	Network	0.500		16.819		

Retail tariff	Tariff component	Fixed^a (c/day)	Peak usage	Off-peak/Flat	Peak demand (\$/kW/month)	Off-peak/Flat demand
Street lighting	Energy			11.991		
	Fixed retail					
	Variable retail			1.741		
	Headroom	0.025		1.528		
	SRES cost pass-through			-0.0540		
	Total	0.525			32.025	

a. Charged per metering point.

Note: Totals may not add due to rounding.

Table 39 Regulated retail tariffs and prices for very large business customers (GST exclusive)

<i>Retail tariff</i>	<i>Tariff component</i>	<i>Fixed^a (c/day)</i>	<i>Peak usage (c/kWh)</i>	<i>Off-peak/Flat usage (c/kWh)</i>	<i>Connection unit (\$/day/unit)</i>	<i>Capacity Flat/Off-peak (\$/kVA of AD/mth)</i>	<i>Demand Flat/Peak (\$/kVA/mth)</i>	<i>Excess reactive Power (\$/excess kVAr/mth)</i>
Tariff 51A—Business over 4 GWh/yr—High voltage 66kV	Network	22091.200		1.505	9.451	4.234	2.500	4.000
	Energy			11.269				
	Fixed retail	2843.402						
	Variable retail			0.772	0.571	0.256	0.151	0.242
	Headroom	1246.730		0.677	0.501	0.224	0.133	0.212
	SRES cost pass-through							
	Total		26181.332		14.223	10.523	4.714	2.784
Tariff 51B—Business over 4 GWh/yr—High voltage 33kV	Network	15591.200		1.505	9.451	5.058	2.500	4.000
	Energy			11.269				
	Fixed retail	2843.402						
	Variable retail			0.772	0.571	0.306	0.151	0.242
	Headroom	921.730		0.677	0.501	0.268	0.133	0.212
	SRES cost pass-through							
	Total		19356.332		14.223	10.523	5.632	2.784
Tariff 51C—Business over 4 GWh/yr—High voltage 22/11kV Bus	Network	14191.200		1.509	9.451	5.815	3.100	4.000
	Energy			11.269				
	Fixed retail	2843.402						
	Variable retail			0.772	0.571	0.351	0.187	0.242
	Headroom	851.730		0.677	0.501	0.308	0.164	0.212

<i>Retail tariff</i>	<i>Tariff component</i>	<i>Fixed^a (c/day)</i>	<i>Peak usage</i>	<i>Off-peak/Flat</i>	<i>Connection unit</i>	<i>Capacity</i>	<i>Demand</i>	<i>Excess reactive</i>
	SRES cost pass-through							
	Total	17886.332		14.227	10.523	6.475	3.452	4.454
Tariff 51D—Business over 4 GWh/yr—High voltage 22/11kV Line	Network	13391.200		1.524	9.451	11.315	6.200	4.000
	Energy			11.269				
	Fixed retail	2843.402						
	Variable retail			0.773	0.571	0.684	0.375	0.242
	Headroom	811.730		0.678	0.501	0.600	0.329	0.212
	SRES cost pass-through							
	Total	17046.332		14.244	10.523	12.599	6.903	4.454
Tariff 52A—Business over 4 GWh/yr—High voltage 66/33kV (STOUD)	Network	10091.200	1.005	1.405	9.451	6.715	11.000	4.000
	Energy		11.269	11.269				
	Fixed retail	2843.402						
	Variable retail		0.742	0.766	0.571	0.406	0.665	0.242
	Headroom	646.730	0.651	0.672	0.501	0.356	0.583	0.212
	SRES cost pass-through							
	Total	13581.332	13.666	14.112	10.523	7.477	12.248	4.454
Tariff 52B—Business over 4 GWh/yr—High voltage 22/11kV Bus (STOUD)	Network	10091.200	1.009	1.409	9.451	4.715	39.600	4.000
	Energy		11.269	11.269				
	Fixed retail	2843.402						
	Variable retail		0.742	0.766	0.571	0.285	2.394	0.242
	Headroom	646.730	0.651	0.672	0.501	0.250	2.100	0.212
	SRES cost pass-through							

<i>Retail tariff</i>	<i>Tariff component</i>	<i>Fixed^a (c/day)</i>	<i>Peak usage</i>	<i>Off-peak/Flat</i>	<i>Connection unit</i>	<i>Capacity</i>	<i>Demand</i>	<i>Excess reactive</i>
	Total	13581.332	13.671	14.116	10.523	5.250	44.093	4.454
Tariff 52C—Business over 4 GWh/yr—High voltage 22/11kV Line (STOUD)	Network	10091.200	1.024	1.424	9.451	8.715	72.333	4.000
	Energy		11.269	11.269				
	Fixed retail	2843.402						
	Variable retail		0.743	0.767	0.571	0.527	4.372	0.242
	Headroom	646.730	0.652	0.673	0.501	0.462	3.835	0.212
	SRES cost pass-through							
	Total	13581.332	13.687	14.133	10.523	9.704	80.540	4.454
Tariff 53—Business over 40 GWh/yr	Network	13391.200		1.524		11.315	6.200	4.000
	Energy			11.269				
	Fixed retail	2843.402						
	Variable retail			0.773		0.684	0.375	0.242
	Headroom	811.730		0.678		0.600	0.329	0.212
	SRES cost pass-through							
	Total	17046.332		14.244		12.599	6.903	4.454

a. Charged per metering point.

Note: Totals may not add due to rounding.

APPENDIX K: SRES COST PASS-THROUGH CALCULATIONS

This appendix provides further information about how the SRES pass-through amounts in section 6.3 were calculated.

First, we calculated the actual cost of SRES compliance during 2016–17, in dollars per megawatt hour (\$/MWh), based on the final STP for the 2016 and 2017 calendar years, using the same approach as ACIL Allen. We then took the difference between the SRES allowance provided in 2016–17 notified prices and the actual 2016–17 SRES cost. This revealed an SRES over-recovery of approximately \$0.40 per MWh (0.040 c/kWh), as shown in table below.

Table 40 2016–17 SRES over-recovery for all settlement classes

	<i>Period</i>	<i>STP (%)^a</i>		<i>Clearing house price^a</i> (\$/MWh)	<i>SRES cost</i> (\$/MWh)	<i>2016–17 average SRES cost</i> (\$/MWh)
		<i>Final</i>	<i>Non-binding</i>			
2016–17 Final determination allowance	1 Jul–31 Dec 2016	9.68%		\$40.00	\$3.872	\$3.74
	1 Jan–30 Jun 2017		9.02%	\$40.00	\$3.608	
2016–17 Actual cost	1 Jul–31 Dec 2016	9.68%		\$40.00	\$3.872	\$3.34
	1 Jan–30 Jun 2017	7.01%		\$40.00	\$2.804	
Over-recovery in 2016–17 (before adjusting for energy losses, variable retail costs, standard offer adjustment/headroom and time value for money)						\$0.40

^a Published by the Clean Energy Regulator.

Next, we adjusted the over-recovery to account for energy losses to determine the SRES liabilities based on energy acquired. In the 2016–17 price determination, we applied a loss factor to energy purchase costs for each settlement class to reflect transmission and distribution losses. We applied the same loss factors to the over-recovered SRES amounts calculated above, consistent with the 2016–17 price 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 7.71 per cent.¹⁵⁵ Finally, we applied the relevant variable retail cost allocators, standing offer adjustment or headroom allowance (which reflect the allowances applying in the year in which 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 2017–18 notified prices.

The calculations and pass-through amounts to apply to each settlement class are set out in the table below.

¹⁵⁵ Estimated in accordance with the QCA's weighted average cost of capital methodology.

Table 41 SRES pass-through amounts for 2017–18 by settlement class

Energex NSLP—residential and controlled load 9000 & 9100	
SRES over-recovery in 2016–17 (c/kWh)	–0.0402
+ Energy losses in 2016–17 (total loss factor)	1.065
+ Discount rate (time value of money)	7.71%
Over recovery before the application of standing offer adjustment and variable retail cost allowance (2017–18 c/kWh)	–0.0461
+ Variable retail cost allowance (residential) in 2016–17 (%)	11.27%
+ Standing offer adjustment in 2016–17 (%)	5.0%
SRES cost pass-through for 2017–18 (c/kWh)	–0.0539
Energex NSLP—small business and unmetered supply	
SRES over-recovery in 2016–17 (c/kWh)	–0.0402
+ Energy losses in 2016–17 (total loss factor)	1.065
+ Discount rate (time value of money)	7.71%
Over recovery before the application of standing offer adjustment and variable retail cost allowance (2017–18 c/kWh)	–0.0461
+ Variable retail cost allowance (small business) in 2016–17 (%)	12.80%
+ Standing offer adjustment in 2016–17 (%)	5.0%
SRES cost pass-through for 2017–18 (c/kWh)	–0.0546
Ergon Energy NSLP—Small, medium and large SAC demand and street lighting	
SRES over-recovery in 2016–17 (c/kWh)	–0.0402
+ Energy losses in 2016–17 (total loss factor)	1.120
+ Discount rate (time value of money)	7.71%
Over recovery before the application of headroom allowance and variable retail cost allowance (2017–18 c/kWh)	–0.0485
+ Variable retail cost allowance (large business) in 2016–17 (%)	6.0445%
+ Headroom allowance in 2016–17 (%)	5.0%
SRES cost pass-through for 2017–18 (c/kWh)	–0.0540