

Tasmanian Energy Prices July 2015 - July 2016

An Update Report on the Tasmanian Tariff-Tracking Project



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An Update report on the Tasmanian Tariff-Tracking Project

May Mauseth Johnston, August 2016



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twitter.com/VinniesAust

Contact: Gavin Dufty

Manager, Social Policy Unit Victoria
St Vincent de Paul Society
Phone: (03) 98955816 or 0439 357 129
twitter.com/gavinduffy

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Disclaimer

The energy offers, tariffs and bill calculations presented in this report and associated workbooks should be used as a general guide only and should not be relied upon. The workbooks are not an appropriate substitute for obtaining an offer from an energy retailer. The information presented in this report and the workbooks is not provided as financial advice. While we have taken great care to ensure accuracy of the information provided in this report and the workbooks, they are suitable for use only as a research and advocacy tool. We do not accept any legal responsibility for errors or inaccuracies. The St Vincent de Paul Society and Alviss Consulting Pty Ltd do not accept liability for any action taken based on the information provided in this report or the associated workbooks or for any loss, economic or otherwise, suffered as a result of reliance on the information presented. If you would like to obtain information about energy offers available to you as a customer, go to Australian Energy Regulator's ["Energy Made Easy"](#) website or contact the energy retailers directly.

Acknowledgements

This project was funded by Energy Consumers Australia (www.energyconsumersaustralia.com.au) as part of its grants process for consumer advocacy projects and research projects for the benefit of consumers of electricity and natural gas.

The views expressed in this document do not necessarily reflect the views of Energy Consumers Australia.

The Tasmanian Tariff-Tracking Project

This project has tracked electricity tariffs in Tasmania from July 2009 to July 2016, and developed a spreadsheet-based tool that allows consumer advocates to build on the initial analysis and continue to track changes as they occur.

We have developed four workbooks that allow the user to enter consumption levels and analyse household bills for electricity offers from July 2009 to July 2016, as well as current published gas and electricity market offers. A new addition to the Tariff-Tracking project this year is market offers available to new solar customers. The workbook allows users to calculate annual bills based on retailers' rates, feed in tariffs offered and additional discounts. Again, the user can enter consumption level as well as choosing to run the bill calculation based on 1.5 kW or 3 kW solar systems.

Workbook 1: Regulated electricity offers July 2009-July 2016

Workbook 2: Pay as you go electricity offers July 2009-July 2016

Workbook 3: Gas market offers post July 2013, 2014, 2015 and 2016

Workbook 4: Solar offers July 2016

The four workbooks can be accessed at the St Vincent de Paul Society's website:
www.vinnies.org.au/energy

This report presents some of the key findings produced by the Tariff-Tracking tool to date.

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1. Introduction

Tasmania implemented the National Energy Customer Framework (NECF) on 1 July 2012 and the Australian Energy Regulator (AER) thus assumed jurisdiction over customer protections. On 1 July 2014, Tasmania introduced full retail competition. The electricity retail market is thus open for new entrants but there are no new retailers offering contracts to residential consumers to date.¹ Aurora's Pay as you go (prepayment meter) product is the only deregulated electricity offer available to residential consumers. For all other metering types, Aurora offers the regulated rates.

Aurora Energy is currently the only electricity retailer that supplies residential consumers and while the regulator determines the prices for customers on the standard rate it does not regulate the pay as you go (pre-payment meter or PAYG) tariffs. Tasmania has approximately 235,000 residential electricity connections and less than 30,000 of these are on PAYG products.²

The average gas consumption (40,000Mj per annum) for Tasmanian households is lower than in Victoria and the ACT but greater than in South Australia, NSW and Queensland. However, relatively few Tasmanian households are connected to reticulated gas (approximately 11,000 households).³ Gas retail prices are not regulated in Tasmania and there are currently two retailers offering gas to residential customers: Aurora and Tas Gas (the latter having the greater market share). While the Tariff-Tracking project have found very little difference between the two gas retailers' prices in the past, Tas Gas customers do pay more than Aurora customers as of July 2016. An average consumption household with Tas Gas will pay \$1,585 per annum while an Aurora customer with the same consumption level will pay \$135 less.

Assumptions

Consistent with our previous reports, we have assumed a typical household consumption of 9,060kWh per annum for all-electric households, 40,000Mj per annum for gas, and 6,400kWh per annum in electricity consumption for dual fuel households on a single rate tariff for the analysis presented in this report.⁴ Aurora has introduced a new two-part time of use tariff (Tariff 93) that attracts a peak rate on weekday mornings from 7am to 10 am and weekday evenings from 4 pm to 9 pm. Consumption outside these times attract the off-peak rate. As there is no

¹ There were no new entrants or new market offers as of 22 August 2016

² OTTER, *Energy in Tasmania - Performance Report 2014-15*, January 2016, 109

³ OTTER, *Energy in Tasmania - Performance Report 2014-15*, January 2015, 145

⁴ OTTER states that a typical Tasmanian customer uses around 9,055kWh per annum. Otter, *Comparison of 2013 Australian Standing Offer Energy Prices*, April 2013 (page 19 for gas and page 10 for electricity). To estimate the combined energy bill for dual fuel households we have assumed that they use approximately 30% less electricity compared to all-electric households. Note that the Tariff-Tracking tool (the workbooks) is designed so users can insert their own consumption levels.

information available in relation to when households typically consume for this new tariff, we have used the same consumption split as that used for tariff 41 with the view to revisit this assumption as soon as data become available. Table 1 shows the consumption splits used the analysis presented in this report.⁵

Table 1 Assumptions: consumption splits for standard tariffs

Tariff type	Tariff combination	Consumption split (%)
Hot water/space heating (41)	31 + 41	60:40
Hot water/space heating (41) with off peak boost (61)	31 + 41 + 61	40:30:30
Time of Use (T93)	93	60:40

* Tariff 62 (night off-peak) has not been included in analysis due to very low customer numbers

For customers on Aurora's seasonally priced PAYG product we have assumed an annual consumption of 9,060kWh with 40% of consumption allocated to summer rates and 60% to winter.⁶ Table 2 below shows the time of week and day consumption assumptions used for the analysis presented in this report.⁷

Table 2 Assumptions: TOU consumption proportions for PAYG tariffs

Time of week/day	Summer	Winter
Weekday morning	16%	15%
Weekday arvo	17%	14%
Weekday evening	23%	18%
Weekday night	15%	24%
Weekend morning	6%	5%
Weekend arvo	8%	7%
Weekend evening	9%	7%
Weekend night	6%	10%
Sum	100%	100%

⁵ These allocations are based on analysis presented in OTTER, *Information Paper, Typical Electricity Customers*, September 2010. Note that OTTER adjusted these figures somewhat in 2014 but since the purpose of the Tariff-Tracking project is to track changes to prices over time, we base the analysis on the original assumptions used for consumption levels and proportions.

⁶ OTTER states that the summer/winter split varies between the PAYG tariff types. For medium consumption households the seasonal split is 40:60 for customers on the Off-peak or Hydroheat tariff, while customers on the standard tariff have an even consumption throughout the year (50:50). For the purpose of this analysis, we have assumed a 40:60 split for all PAYG tariff types but note that this assumption can be varied in the Tariff-Tracking tool (workbook 2).

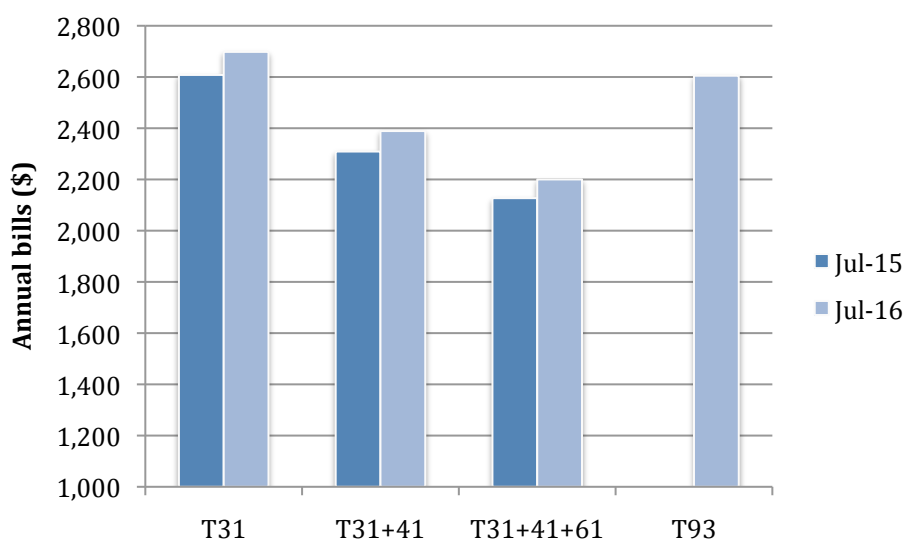
⁷ Based on figures presented in OTTER, *2013 Aurora Pay As You Go price comparison report*, August 2013. Note that our summer evening proportion is 1% less than that used by OTTER in order to ensure that it adds up to 100%.

2. Electricity and gas price changes from July 2015 to July 2016

In terms of general trends, the tariff analysis has found that:

- Since last year (July 2015), annual electricity bills have increased by approximately 3.5% for average consumption households. See chart 1 below.
- Tasmanian electricity retail prices taking effect in July 2016 produce annual bills that are \$70 to \$90 more (depending on tariff types) than they were last year (July 2015). See chart 2 below.
- The annual cost of electricity for average consumption households on Aurora's pay as you go (PAYG) time of use tariffs have increased by between \$70-\$80. See chart 4 below.
- Annual gas bills have remained the same for Aurora customers but increased by \$165 for Tas Gas customers. See chart 5 below.

Chart 1 Regulated electricity prices 2015-16, annual bills for households consuming 9,060kWh per annum (incl GST)⁸



⁸ See Table 1 for a breakdown of the consumption splits used for these calculations

Chart 2 Increases to the annual bill from July 2015 to July 2016, regulated electricity prices for households consuming 9,060kWh per annum

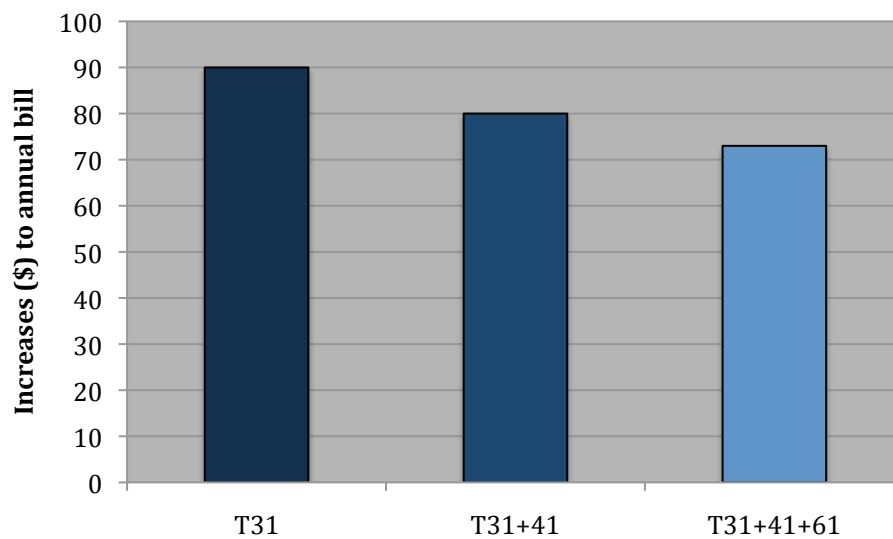
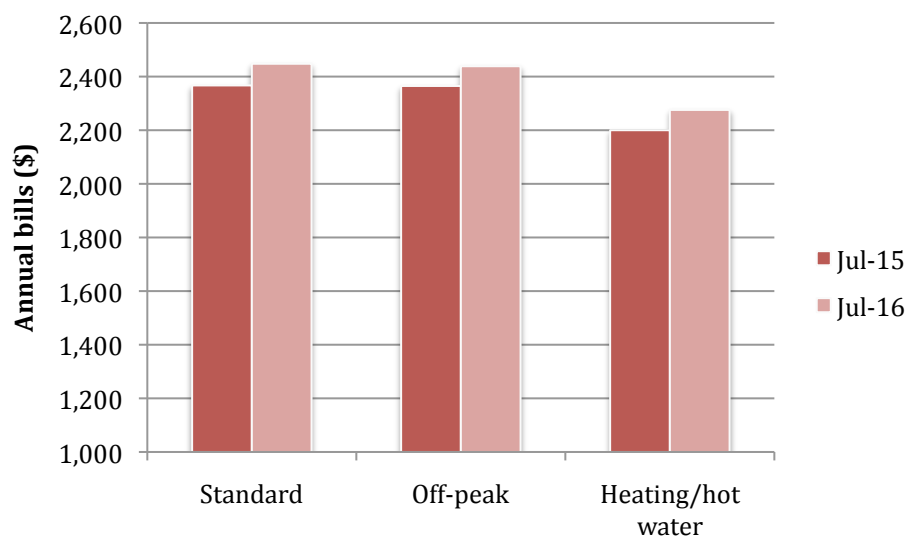


Chart 3 Electricity prices July 2015 – July 2016, Pay as you go market offers, annual bills for households consuming 9,060kWh per annum (incl GST)⁹



⁹ See Table 2 for a breakdown of the consumption splits used for these calculations

Chart 4 Increases to the annual bill from July 2015 – July 2016, Pay as you go market offers for households consuming 9,060kWh per annum

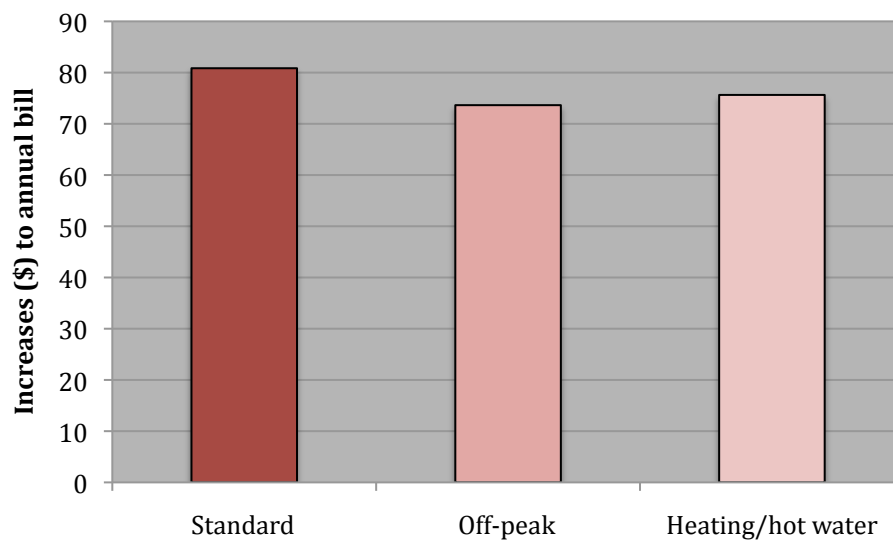
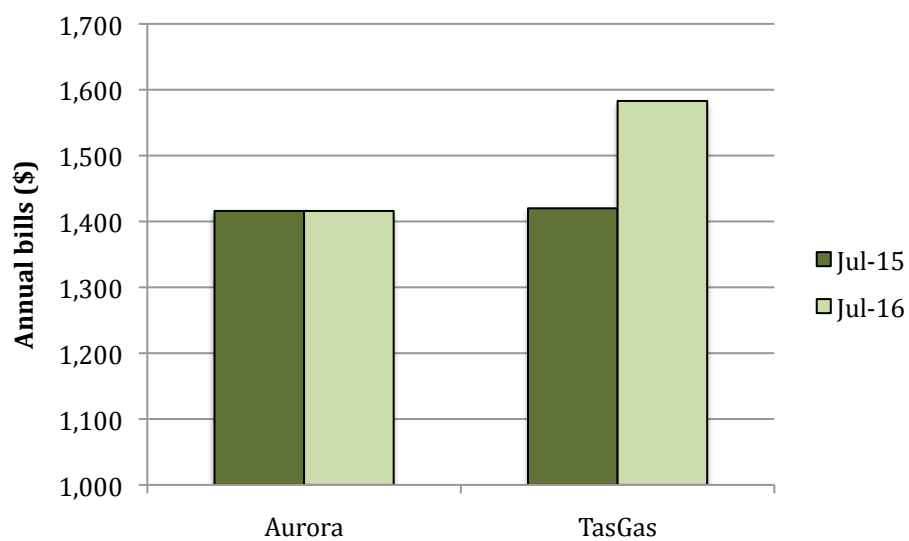


Chart 5 Gas prices July 2015 – July 2016, as annual bills, 40,000Mj per annum (incl GST)



3. Regulated and market offers post July 2016

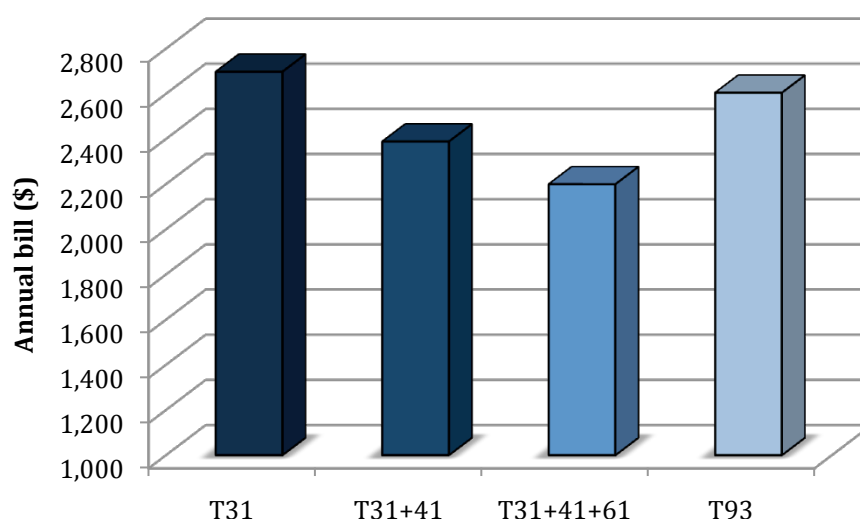
Although Tasmania introduced full retail competition in July 2014, residential electricity customers can currently only choose between Aurora's regulated standard rates and PAYG products.

There are three main tariff types for the standard rates: the flat rate (tariff 31), flat rate combined with a hot water tariff (tariff 41) and flat rate combined with an off-peak tariff (tariff 61). The combination of a flat rate and hot water/space heating tariff is most common (86% of customers). Only 6% of customers are on a flat rate and 8% are on an off-peak combination tariff.¹⁰ As of July 2016, Aurora has also introduced a new time of use (TOU) tariff (T93).

3.1 Electricity: Regulated and market offers post July 2016

Chart 6 below shows that households using 9,060kWh per annum will have an annual electricity bill of between \$2,200 and \$2,700. The tariff combination that is most likely to produce the lowest annual bill for households with a typical consumption pattern is flat rate (T31) combined with off-peak (T61) and a hot water tariff (T41).

Chart 6 Regulated electricity offers as annual bills, post July 2016, 9,060kWh per annum (GST inc)¹¹

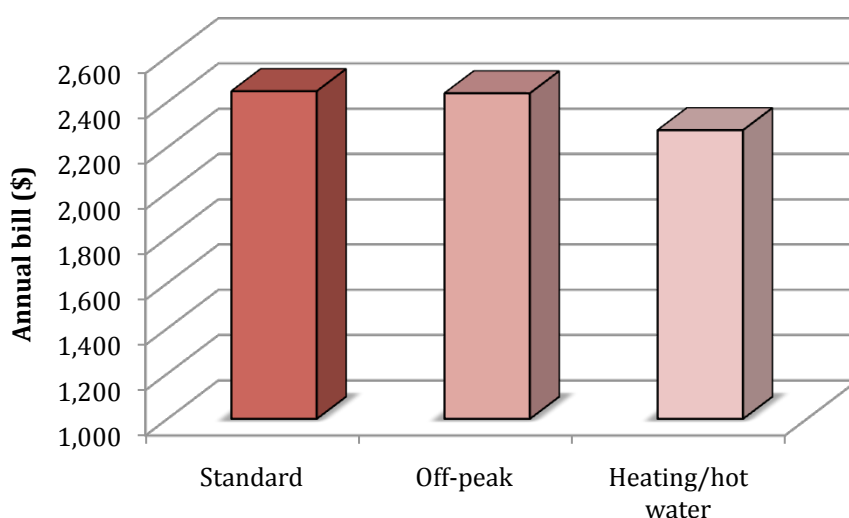


¹⁰ OTTER, *Information Paper, Typical Electricity Customers*, May 2014, 3. Note: There is also a tariff 62 but as very few customers are on this tariff it has not been included in this analysis.

¹¹ See Table 1 for a breakdown of the consumption splits used for these calculations

Chart 7 below shows that typical consumption households on Aurora’s PAYG tariffs will have an annual electricity bill of between \$2,275 and \$2,450, and that the Heating and Hot Water tariff (formerly known as Hydroheat) is the PAYG product that produces the lowest annual bill for households with typical consumption patterns.

Chart 7 Electricity market offers (PAYG) as annual bills, post July 2016, 9,060kWh per annum (GST inc)¹²



3.2 Gas market offers post July 2016

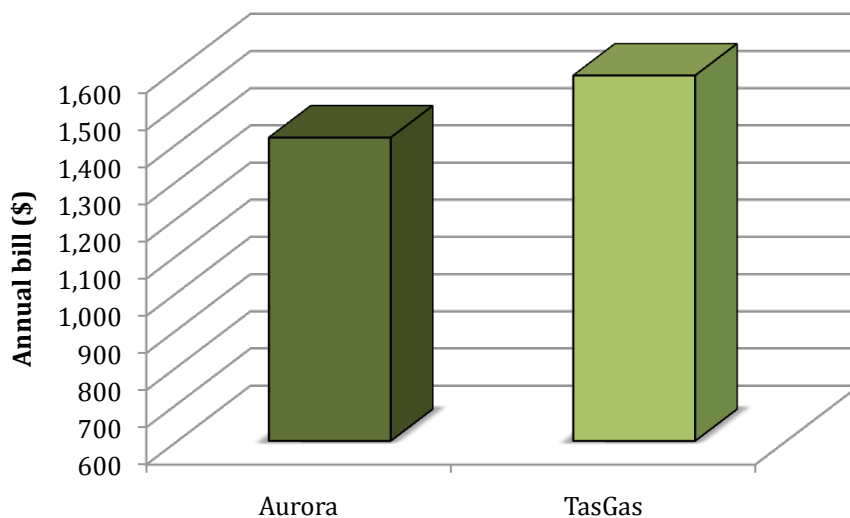
There are no regulated gas offers in Tasmania and only Aurora and Tas Gas currently have gas market offers for residential consumers. As of 2014 Aurora had a gas market share of approximately 35% and Tas Gas held the remaining 65%.¹³

Chart 8 below shows that an Aurora customer with average gas consumption will pay approximately \$1,415 per annum while a Tas Gas customer with the same consumption level will pay approximately \$1,585 per annum (\$165 more).

¹² See Table 2 for a breakdown of the consumption splits used for these calculations

¹³ OTTER, *Energy in Tasmania, Performance Report 2014-15*, January 2016, 145

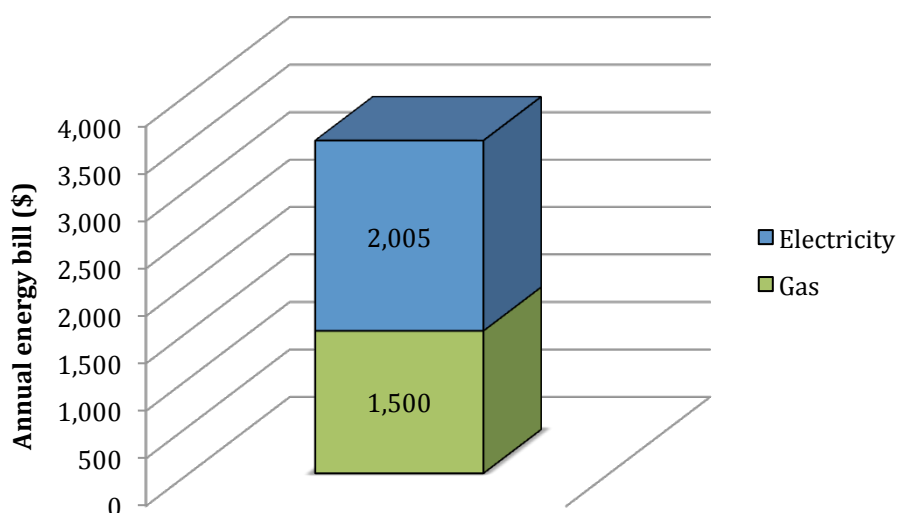
Chart 8 Gas offers post July 2016, as annual bills, 40,000Mj per annum (incl GST)



3.3 Energy costs for dual fuel households post July 2016

Households with reticulated gas will typically have higher energy bills compared to all-electric households.¹⁴ Chart 9 below shows that a dual fuel household consuming 6,400kWh of electricity per annum (approximately 30% less than an average all-electric household) and 40,000Mj of gas will have an annual energy bill of approximately \$3,500.

Chart 9 Annual bill for dual fuel households post July 2016, 6,400kWh (standard rate) and 40,000Mj (incl GST)¹⁵



¹⁴ It should be noted, however, that many all-electric households have other heating expenses such as fire wood or liquefied petroleum gas (LPG)

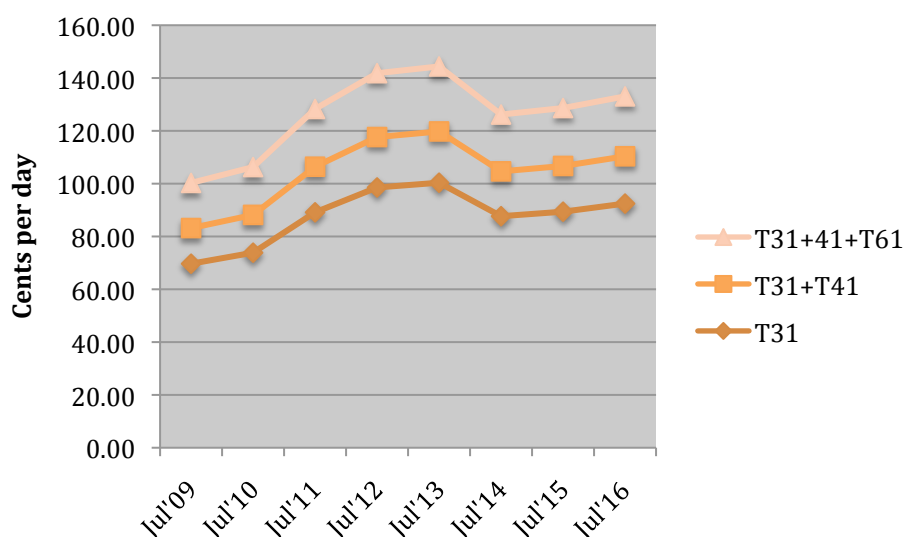
¹⁵ Annual gas bill calculation is based on the average of Aurora and Tas Gas' rates

4. Supply charges

4.1 Electricity supply charges

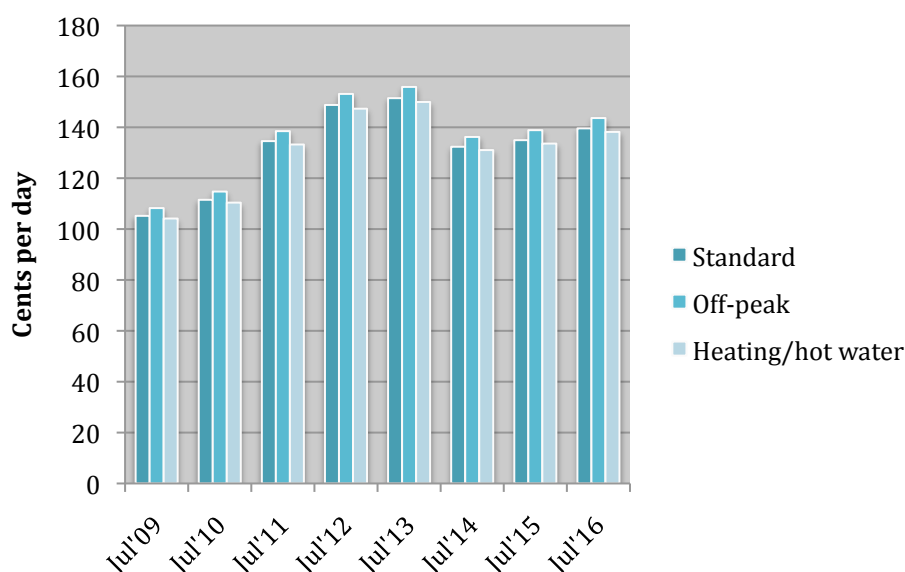
The supply charge is a fixed daily charge that is paid in addition to the consumption charges for electricity used. In Tasmania the supply charge for residential electricity has decreased by 13% in July 2014 (both the regulated rates and Aurora's PAYG offer). In July 2015, however, all offers increased by 2% and in July 2016 they increased by another 3%. As of July 2015, customers on the flat rate (Tariff 31) pay just over \$335 per annum in fixed supply charges while customers with hot water/heating rates (Tariff 41) pay \$400. The greatest supply charge of \$485 per annum is applied to those who have a hot water/heating tariff as well as an off-peak boost (T31+T41+T61). Chart 10 below shows the changes to the daily supply charges for regulated electricity rates from 2013 to 2016.

Chart 10 Daily supply charge, regulated electricity offers, 2009-2016 (incl GST)



Customers on Aurora's PAYG offers, however, pay from \$505 to \$525 per annum in fixed charges. Customers on the standard PAYG rate pay \$170 more in fixed charges per annum than customers on the standard regulated rate. Chart 11 below shows the changes to the daily supply charges for PAYG offers from July 2009 to July 2016.

Chart 11 Daily supply charge, Aurora's PAYG electricity offers, 2009-16 (incl GST)

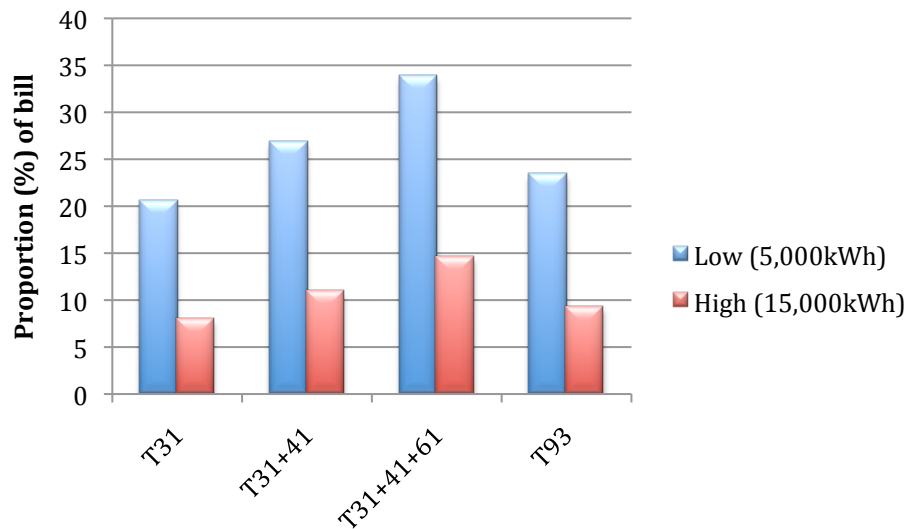


High supply charges result in low consumption households paying a proportionally higher cost per unit of energy than high consumption households. This has significant equity implications as some customer classes characterised by low and fixed income also use less electricity than the Tasmanian average. Pensioners make up one of these lower consumption groups.¹⁶

Chart 12 below shows the difference between households consuming 5,000kWh per annum (blue bar) and households consuming 15,000kWh per annum (red bar) when it comes to the proportion of the annual electricity bill that goes to cover fixed supply charges. The fixed supply charge is currently between 23-34% of the annual electricity bill for a low consumption household with an off-peak rate (Tariffs 41, 41 + 61 and T93) and 21% on the flat rate (Tariff 31). A high consumption household on the other hand, would pay between 8-15% of their annual bill in fixed charges.

¹⁶ Concession card holders on Aurora's PAYG offers do not pay the fixed supply charge.

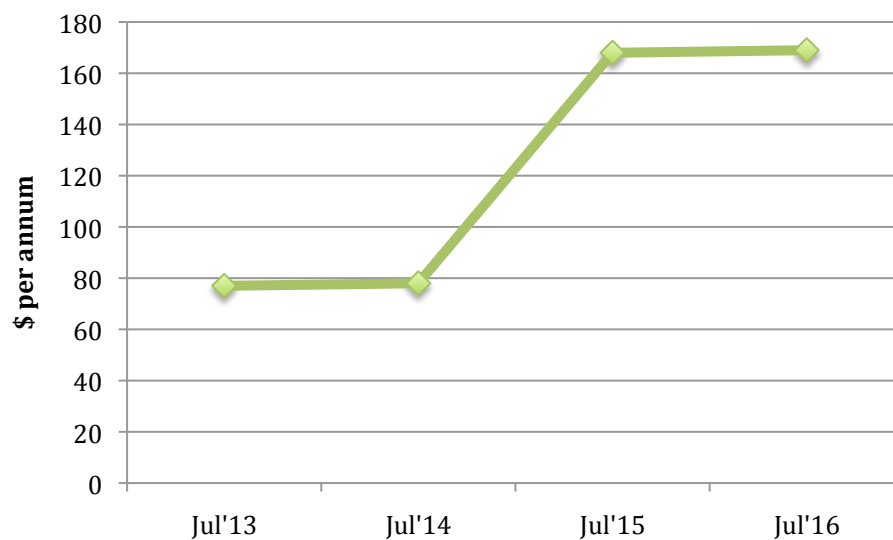
Chart 12 Supply charge as proportion of annual electricity bills, high vs. low consumption, July 2016



4.2 Gas supply charges

The gas supply charge, at just over 46 cents/day, is significantly lower than the electricity supply charges and it has remained stable since 2015. Tasmanian households currently pay approximately \$170 per annum in order to be connected to natural gas. Chart 13 shows annual supply charge for gas customers from July 2013 to July 2016.

Chart 13 Gas supply charge as \$ per annum, 2013-2016 (incl GST)

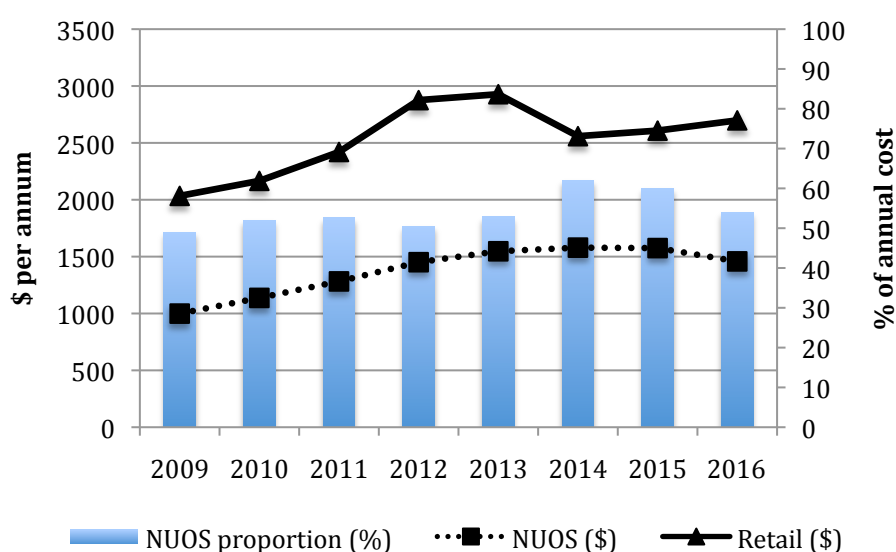


5. Network charges

The Tasmanian electricity network, TasNetworks, introduces new Network Use of System (NUOS) charges in July every year. These NUOS charges are approved by the Australian Energy Regulator (AER) and comprise Transmission Use of System (TUOS) and Distribution Use of System (DUOS) as well as other costs such as jurisdictional charges. The retailers can, and generally will, build changes to the NUOS (in relation to both shape and price) into their retail tariffs. The retailers can, and generally will, build changes to the NUOS (in relation to both shape and price) into their market retail tariffs. As Tasmania also has a regulated retail offer, the Office of the Tasmanian Economic Regulator (OTTER) also changes the regulated retail rate to reflect changes to the NUOS.

The chart presented in this section shows that Aurora/TasNetwork's NUOS charges have decreased for average consumption households since July 2014 while the overall retail bill has increased. In both July 2015 and 2016, retail prices increased more than the NUOS and the NUOS as a proportion of the total bill has thus declined (currently at 54%). Chart 14 shows annual retail bills (solid line), NUOS charges as annual cost (dotted line) and NUOS as proportion of annual bill (columns).

Chart 14 Aurora: Retail bill per annum (incl. GST), NUOS charges (excl. GST) and NUOS as proportion of total bill from 2009 to 2016. Based on the regulated/standing offer retail tariff, single rate, 9,060 kWh per annum¹⁷



¹⁷ Based on the regulated offer rates from 2009 to 2016, presented as annual bills for households using 9,060kWh per annum (flat rate). The annual NUOS charges have been calculated by allocating 2,265kWh per quarter (again based on annual consumption of 9,060kWh) to the step charges stipulated in the NUOS. The annual NUOS cost also includes fixed charges.

6. Solar offers

There are approximately 26,300 domestic solar systems in the Tasmania.¹⁸ Many of these households are currently receiving a 'one for one' (1:1) feed in tariff (FIT) under the net metering buyback scheme (NMBS) but as the scheme is closed to new entrants, new solar customers will receive the regulated FIT rate. This FIT rate is reviewed on an annual basis and it currently pays 6.671 c/kWh. Retailers may offer a greater voluntary FIT rate than the regulated rate but as there are no new entrants in the residential electricity market to date, new solar customers will be on Aurora's regulated offer and receive the regulated FIT rate.

This section analyses electricity bills for Tasmanian customers with 1.5 kW and 3 kW systems installed.

Methodology and assumptions

To calculate the annual bills for the regulated solar offers the following assumptions and methodology have been applied:

- An annual household consumption of 9,060kWh (including both produced and imported).
- Calculations have been produced for households with 1.5 kW and 3 kW systems only.
- An annual generation capacity per kW installed of 1.185 MWh and an export rate of 47.4% for 3 kW systems and 14.9% for 1.5 kW systems.¹⁹
- Only FIT rates available to new customers have been included. The regulated FIT rate is currently 6.671 c/kWh (excluding GST).
- For tariffs with an off-peak component, we have used the same load allocations applied to the non-solar analysis above (see table 1).
- A flat annual consumption has been assumed.

Chart 15 below shows that households with a 3 kW solar system installed can receive bills that are around 23% lower compared to non-solar customers. For customers on the single rate (T31) this saving amounts to just over \$600 per annum. For households with a smaller system installed (1.5 kW) the savings are approximately 15% or \$400 per annum for customers on the single rate (T31).

¹⁸ Clean Energy Council, Clean Energy Australia Report 2015,26

¹⁹ The 1.185 generation capacity is based on small-scale technology certificates (STC) for zone 4. The export rates are based on Melbourne and were used for the analysis presented in a report for the Alternative Technology Association (ATA) by Alviss Consulting (Alviss Consulting, Retail Offers and Market Transparency for New Solar Customers, June 2013). As the data is based on Melbourne it might assume slightly higher export rate than the Tasmanian average.

Chart 15 Solar customers vs. non-solar customers: Estimated annual bills (incl. GST) post July 2016. Based on the regulated retail tariff, 9,060 kWh per annum, 1.5 and 3 kW solar systems.

