



## **Quarterly Survey of Domestic Electricity Prices**

Introduction - Report for 15 May 2017

#### What does the QSDEP monitor?

The QSDEP monitors tariffs publicly advertised in the retail electricity market on a particular date. This provides a handy indicator of how recent price increases are likely to impact on consumers. However, it does not reflect what customers have actually paid for electricity in any particular period, as the QSDEP only models one type of customer in each city or town, when in reality, consumption and pricing plans vary significantly across households.

For information on what households have actually paid for electricity over time, please see the Ministry's sales based retail electricity prices. Sales based data reflects all discounts actually received by consumers, such as prompt payment discounts, lower fixed term prices, loyalty rewards, and acquisition and retention payments.

#### What are the key assumptions for the model QSDEP household?

The QSDEP attempts to model a typical New Zealand household. The model customer has the following key attributes in each of the towns and cities where prices are surveyed:

- They consume an average of around 22 kWh per day. This equates to an annual consumption of 8000 kWh.
- They choose the lowest publicly advertised retail plan available with each retailer without a fixed term contract. For a customer using 8000 kWh in a year, this is always a 'low user' plan with low fixed charges.
- They pay their bill on time and receive any available prompt payment discounts (including electronic or online only discounts).
- They solely use electricity for their water heating and have a ripple controlled electricity meter.
- They are on the most common, controlled, retail metering configuration in each town and city we monitor. The most common retail metering configurations are either
  - o All inclusive customers are changed one rate for all electricity that is purchased accounting for the fact that usage for hot water is controlled.
  - o Uncontrolled/Controlled electricity use for water is metered separately from other usage and controlled. We assume 60% of household demand is uncontrolled and 40% is controlled.
  - o Day/Night electricity use is metered demanding on time of day, but hot water usage is still controlled. We assume 70% day and 30% night usage.

#### How are regional average retail prices calculated for the report?

- For each retailer in each town or city, the Ministry calculates an average price based on the QSDEP model household based on data sourced from Consumer Powerswitch. This information is no longer published in the QSDEP report, as retailer specific price comparisons should be sourced directly from Consumer Powerswitch. See

  www.powerswitch.org.nz
- Market share information for individual lines pricing areas is obtained from the Electricity Authority's Electricity Market Information (EMI) website. In the QSDEP report we use the EA latest report on "Market share trends by network reporting region". This can be obtained at:

   www.emi.ea.govt.nz/Datasets/Retail/Market\_structure
- This market share information is based on ICP data which includes residential consumers, as well as commercial and industrial consumers. Approximately 87% of ICPs are residential customers.

### How does the QSDEP report break down the retail price into a 'Lines Component' and an 'Energy and Others Costs' component?

As part of the QSDEP we collect lines charge information separately for all electricity network companies through disclosures on their website. This information is used to calculate a 'Lines Component' of the total retail charge. The 'Energy and Others Costs' component is then calculated by subtracting the 'Lines Component' from the retail price (with the exception of 'The Line Company TLC Limited' which is the only lines company in New Zealand to directly bill residential consumers ).

#### Where are metering charges included?

Metering charges are included in the 'Energy and Others Costs' component. For towns supplied by TLC Limited, the metering cost is still included under the 'Energy and Others Costs' even though it is usually billed by TLC Limited. This ensures consistent treatment of lines charges across line areas.

#### How is GST included?

The total retail charge in each town or city is inclusive of GST. The 'Lines Component' and 'Energy and Others Costs' components are also inclusive of GST. As a consequence the proportion of the total bill that is lines charges versus other charges is the same as it would be if GST were excluded from both parts.

#### What about lines company discounts and energy trust distributions?

The QSDEP report does not include any discounts or trust distributions which reflect consumer ownership in any of our retail or line price data series. This is the best way to consistently treat all lines company discounts and energy trust distributions equally in our consumer prices.

However the QSDEP does include footnotes which identify the most recent information we have on additional discounts made by lines companies and energy trusts

## (currently for the year ending 31 March 2015) for the model QSDEP customer.

Would you like further information?
Please see the more detailed document "Key Assumptions for the QSDEP".

#### Important

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Analysis of Change in Last Quarter

# **Quarterly Survey of Domestic Electricity Prices**

Nominal indicators on 15 May 2017

Modelled NZ Consumer - 22 kWh per day on cheapest low user tariff available without a fixed term contract. For further detail see the notes page.

\* indicates an area where, due to GXP based billing, it is not possible to completely align lines charges with retails charges. Therefore the breakdown into components is an approximation.

|                                |   |       | Indicat      | tors on 15-   | 5-2017              | Pei          | centage Ch    | ange                | Absol        | ute Price C   | hange               |
|--------------------------------|---|-------|--------------|---------------|---------------------|--------------|---------------|---------------------|--------------|---------------|---------------------|
| Location                       | Lines Company                                       | Notes | Retail       | Lines<br>Comp | Energy<br>and Other | Retail       | Lines<br>Comp | Energy<br>and Other | Retail       | Lines<br>Comp | Energy<br>and Other |
|                                |   |       | c/kWh        | c/kWh         | c/kWh               | %            | %             | %                   | c/kWh        | c/kWh         | c/kWh               |
| Nov. Zonland                   |   |       | 20.2         | 42.4          | 47.4                | 0.00         | 0.00/         | 0.00/               | 0.24         | 0.44          | 0.10                |
| New Zealand                    |   |       | 29.2         | 12.1          | 17.1                | 0.8%         | 0.9%          | 0.8%                | 0.24         | 0.11          | 0.13                |
| North Island                   |   |       |              |               |                     |              |               |                     |              |               |                     |
| Kerikeri                       | Top Energy  | 1     | 38.9         | 20.1          | 18.8                | 0.3%         | 0.0%          | 0.6%                | 0.10         | -             | 0.10                |
| Whangarei                      | Northpower  | 2,3   | 30.1         | 12.1          | 18.1                | 1.2%         | 5.2%          | -1.2%               | 0.37         | 0.60          | -0.23               |
| Auckland North Shore           | Vector (Northern)                                   |       | 27.8         | 11.6          | 16.2                | 1.2%         | 0.6%          | 1.7%                | 0.34         | 0.07          | 0.27                |
| Auckland Central               | Vector (Auckland)                                   | 4     | 27.7         | 11.6          | 16.1                | 0.7%         | 0.6%          |                     | 0.19         | 0.07          | 0.12                |
| Pukekohe                       | Counties Power                                      | 5     | 29.6         | 12.7          | 16.9                | 0.3%         |               |                     | 0.10         | 0.19          | -0.10               |
| Tauranga                       | Powerco (Tauranga)                                  | 6     | 33.1         | 12.0          | 21.1                | 1.3%         |               |                     | 0.43         | 0.03          | 0.40                |
| Hamilton                       | WEL Networks  | 7     | 29.9         | 13.9          | 16.0                | 1.9%         |               |                     | 0.56         | 0.20          | 0.36                |
| Thames                         | Powerco (Thames Valley)                             |       | 31.0         | 13.1          | 18.0                | 1.7%         | 0.2%          |                     | 0.51         | 0.03          | 0.48                |
| Cambridge                      | Waipa Networks                                      | 8     | 26.7         | 8.7           | 18.0                | 0.5%         |               |                     | 0.13         | 0.32          | -0.18               |
| Whakatane                      | Horizon Energy (Urban)                              |       | 30.5         | 12.6          | 17.9                | 1.3%         | 0.0%          |                     | 0.40         | -             | 0.40                |
| Rotorua                        | Unison (Rotorua)                                    |       | 32.1         | 13.8          | 18.4                | 0.1%         |               |                     | 0.03         | 0.11          | -0.09               |
| Taupo                          | Unison (Taupo)                                      |       | 32.0         | 13.8          | 18.3                | 0.0%         |               |                     | -0.01        | 0.11          | -0.13               |
| Gisborne                       | Eastland (High Density)                             |       | 33.9         | 15.4          | 18.5                | 0.4%         | 0.0%          |                     | 0.13         | -             | 0.13                |
| * New Plymouth                 | Powerco (Western A - Nth Taranaki)                  |       | 29.0         | 11.7          | 17.3                | 1.8%         |               |                     | 0.50         | 0.29          | 0.22                |
| Otorohanga                     | The Lines Company (Hangatiki GXP - LV High Density) | 9     | 31.7         | 14.0          | 17.7                | 1.0%         |               |                     | 0.31         | 0.31          | 0.01                |
| Taumaranui                     | The Lines Company (Ongarue GXP - LV High Density)   |       | 31.7         | 14.0          | 17.7                | -1.7%        |               |                     | -0.56        | -0.57         | 0.01                |
| Napier                         | Unison (Hawke's Bay)                                | 10    | 30.6         | 14.6          | 16.1                | 0.4%         |               |                     | 0.11         | -             | 0.11                |
| * Hawera                       | Powerco (Western B - Sth Taranaki)                  |       | 32.8         | 14.3          | 18.5                | 1.7%         | 2.2%          |                     | 0.56         | 0.31          | 0.25                |
| Waipukurau                     | Centralines   | 11    | 35.3         | 18.6          | 16.7                | 2.2%         | 0.0%          |                     | 0.76         | - 0.20        | 0.76                |
| * Whanganui                    | Powerco (Western A - Whanganui)                     | 12    | 30.2         | 11.7          | 18.4                | 1.8%         |               |                     | 0.53         | 0.29          | 0.25                |
| * Dannevirke<br>* Masterton    | Scanpower   | 12    | 31.1         | 14.7          | 16.5                | 0.9%         | 3.1%          |                     | 0.29         | 0.44          | -0.15               |
|                                | Powerco (Western B - Wairarapa)                     |       | 33.1<br>29.0 | 14.3<br>11.7  | 18.8<br>17.3        | 1.5%<br>1.5% |               |                     | 0.49<br>0.44 | 0.31<br>0.29  | 0.19<br>0.15        |
| * Palmerston North Paraparaumu | Powerco (Western A - Manawatu)                      | 13    | 27.6         | 11.7          | 16.2                | 0.0%         |               |                     | 0.44         | 0.29          | 0.15                |
| Wellington City                | Electra  Wellington Electricity Lines               | 15    | 27.5         | 11.4          | 16.2                | 0.0%         |               |                     | 0.01         | -0.00         | 0.01                |
| South Island                   |   |       |              |               |                     |              |               |                     |              |               |                     |
| Nelson                         |   |       | 30.1         | 10.0          | 20.1                | -0.2%        | 0.0%          | -0.2%               | -0.05        |               | 0.05                |
| Richmond                       | Nelson Electricity  Network Tasman                  | 14,15 | 27.5         | 9.1           | 18.4                | -0.2%        |               |                     | -0.05        | -             | -0.05<br>-0.02      |
| Blenhiem                       | Network Tasman  Marlborough Lines (Non-remote)      | 16,17 | 34.1         | 14.5          | 19.6                | 0.2%         |               |                     | 0.02         | _             | 0.02                |
| Westport                       | Mariborough Lines (Non-remote)  Buller Electricity  | 10,17 | 37.6         | 16.8          | 20.8                | 0.2%         | 0.0%          |                     | 0.07         |               | 0.07                |
| Greymouth                      | Westpower   | 18    | 34.1         | 13.2          | 20.8                | 0.4%         |               |                     | 0.10         | 0.36          | -0.22               |
| Rangiora                       | Mainpower (North Canterbury)                        | 19, A | 29.7         | 11.7          | 18.0                | 0.5%         | 0.0%          |                     | 0.14         | - 0.50        | 0.13                |
| Kaiapoi                        | Mainpower (Kaiapoi)                                 | 15,7  | 27.5         | 9.5           | 18.0                | 0.5%         |               |                     | 0.14         | _             | 0.14                |
| * Christchurch                 | Orion NZ  |       | 27.8         | 11.2          | 16.6                | 0.6%         | 0.6%          |                     | 0.17         | 0.07          | 0.10                |
| Ashburton                      | EA Networks   | 20    | 27.2         | 7.9           | 19.3                | -0.2%        |               |                     | -0.04        | -             | -0.04               |
| Timaru                         | Alpine Energy (Low Cost Area)                       | 21    | 28.1         | 11.6          | 16.5                | 0.7%         |               |                     | 0.19         | 1.08          | -0.90               |
| Oamaru                         | Network Waitaki                                     | 22    | 27.0         | 9.6           | 17.4                | 0.6%         | 0.0%          |                     | 0.16         | -             | 0.16                |
| Dunedin                        | Aurora Energy (Dunedin)                             |       | 25.0         | 8.6           | 16.4                | -0.1%        | 1.6%          | -0.9%               | -0.02        | 0.13          | -0.15               |
| Queenstown                     | Aurora Energy (Queenstown)                          |       | 28.0         | 10.7          | 17.3                | -0.3%        | -2.0%         |                     | -0.10        | -0.22         | 0.12                |
| Cromwell                       | Aurora Energy (Clyde/Cromwell)                      |       | 32.0         | 14.8          | 17.2                | -0.1%        | 0.5%          | -0.6%               | -0.02        | 0.07          | -0.10               |
| * Balclutha                    | OtagoNet Joint Venture                              |       | 40.4         | 20.9          | 19.5                | 0.6%         | 4.4%          | -3.2%               | 0.24         | 0.89          | -0.65               |
| * Winton                       | The Power Company (Urban)                           | 23    | 31.1         | 12.3          | 18.7                | 0.3%         | -3.5%         | 2.9%                | 0.09         | -0.44         | 0.53                |
| * Invercargill                 | Electricity Invercargill                            |       | 27.4         | 10.0          | 17.4                | 0.1%         | -2.0%         | 1.3%                | 0.02         | -0.21         | 0.23                |
|                                | in based discounts and distributions for the year   |       | 2015         |               |                     |              |               |                     |              |               |                     |

**Notes on additional ownership based discounts and distributions for the year ending 31 March 2015**For the full report see our webpage

| Note | <u>Type</u>                         | Made by   | Amount for model customer |  |  |  |  |  |  |  |
|------|-------------------------------------|---|---------------------------|--|--|--|--|--|--|--|
| 1    | Lines company discount              | Top Energy  | 2.5 c/kWh                 |  |  |  |  |  |  |  |
| 2    | Lines company discount              | Northpower  | 1.2 c/kWh                 |  |  |  |  |  |  |  |
| 3    | Lines trust distribution            | Northpower Electric Power Trust   | 1.0 c/kWh                 |  |  |  |  |  |  |  |
| 4    | Lines trust distribution            | Auckland Energy Consumers Trust   | 4.2 c/kWh                 |  |  |  |  |  |  |  |
| 5    | Lines company discount              | Counties Power  | 2.9 c/kWh                 |  |  |  |  |  |  |  |
| 6    | Retailer trust distribution         | Tauranga Energy Consumers Trust   | 6.4 c/kWh                 |  |  |  |  |  |  |  |
| 7    | Lines company discount              | WEL Networks  | 2.7 c/kWh                 |  |  |  |  |  |  |  |
| 8    | Lines company discount              | Waipa Networks  | 1.5 c/kWh                 |  |  |  |  |  |  |  |
| 9    | Lines trust distribution            | Waitomo Energy Services Consumer Trust  | 2.6 c/kWh                 |  |  |  |  |  |  |  |
| 10   | Lines trust distribution            | Hawkes Bay Power Consumers Trust  | 2.1 c/kWh                 |  |  |  |  |  |  |  |
| 11   | Lines company discount              | Centralines   | 1.7 c/kWh                 |  |  |  |  |  |  |  |
| 12   | Lines company discount              | Scanpower   | 3.4 c/kWh                 |  |  |  |  |  |  |  |
| 13   | Lines company discount              | Electra   | 1.8 c/kWh                 |  |  |  |  |  |  |  |
| 14   | Lines company discount              | Network Tasman  | 3.1 c/kWh                 |  |  |  |  |  |  |  |
| 15   | Lines trust distribution            | Network Tasman Trust  | 1.0 c/kWh                 |  |  |  |  |  |  |  |
| 16   | Lines company discount              | Marlborough Lines   | 2.8 c/kWh                 |  |  |  |  |  |  |  |
| 17   | Lines trust distribution            | Marlborough Electric Power Trust  | 0.6 c/kWh                 |  |  |  |  |  |  |  |
| 18   | Lines company discount              | Westpower   | 1.3 c/kWh                 |  |  |  |  |  |  |  |
| 19   | Lines company discount              | Mainpower   | 2.2 c/kWh                 |  |  |  |  |  |  |  |
| 20   | Lines company discount              | EA Networks   | 0.9 c/kWh                 |  |  |  |  |  |  |  |
| 21   | Lines trust distribution            | Line Trust South Canterbury   | 0.6 c/kWh                 |  |  |  |  |  |  |  |
| 22   | Lines company discount              | Network Waitaki   | 1.6 c/kWh                 |  |  |  |  |  |  |  |
| 23   | Lines company discount              | The Power Company   | 1.8 c/kWh                 |  |  |  |  |  |  |  |
| Α    | Mainpower pays a discount to custor | Mainpower pays a discount to customers in North Canterbury at the time of billing. Retail prices are published inclusive this discount. |                           |  |  |  |  |  |  |  |

This ownership discount has been added to the retail price in order to ensure consistent treatment of discounts.

6/06/2017