

Performance Measures Quarterly Report for the period ending 31 December 2015

1 Summary

This Report provides an update on the performance measures that Gas Industry Co monitors on a regular basis. The purpose of these measures is to track the performance of the Gas (Switching Arrangements) Rules 2008 (the Switching Rules), the Gas (Downstream Reconciliation) Rules 2008 (the Reconciliation Rules), and the Gas Governance (Critical Contingency Management) Regulations 2008 (CCM Regulations), both in terms of activity related to these governance arrangements and the competitive outcomes that they foster. The Report also tracks transmission balancing actions, as a means of informing Gas Industry Co's work on this issue.

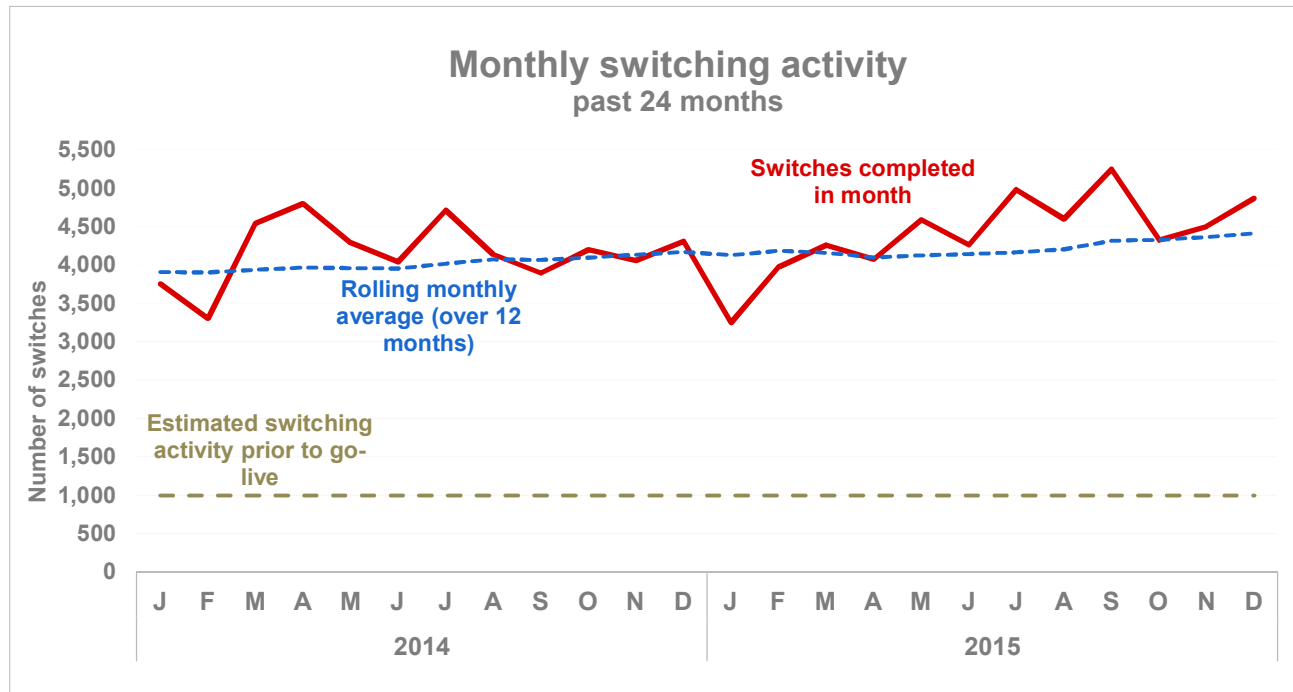
Explanatory details about the charts can be found in the Appendix to this report.

Highlights of the Report:

- With the entry of Switch Utilities to the retail gas market in July, there are now 11 retail gas brands owned by nine different retail companies.
- Nearly 99% of gas customers are connected to a gate where eight or more retailers trade, demonstrating that gas retailers generally are competitive throughout the North Island.
- The annual rate of switching for the past 12 months is 19.6%. Switching rates have been over 17% for the past two years.
- In December, the average time for a switch to be completed was 2.45 days; the 12-month average time is 4.4 days.
- 56% of residential consumer sites have switched retailer at least once in the past five years; 64% of small commercial and 72% of large commercial sites have switched at least once.
- Average annual unaccounted-for gas (UFG) over the past year stands at about 1.0% (compared with about 2% in 2009).
- Genesis is the largest retailer by customer share. Nova Energy is the largest retailer by volume market share and has the largest share of commercial and industrial customers.

2 Switching performance measures

Chart 1: Monthly switching activity



- Over 4,000 consumers switch gas supplier per month on average.
- The churn rate for the 12 months to December 2015 is 19.6%, one of the highest rates of retail utility switching worldwide. Gas customers can switch retailers for many reasons, but the high level of activity in the gas retail market suggests that customers find changing retailer easy and can put pressure on retailers to offer competitive terms and pricing.

Chart 2: Regional switching activity

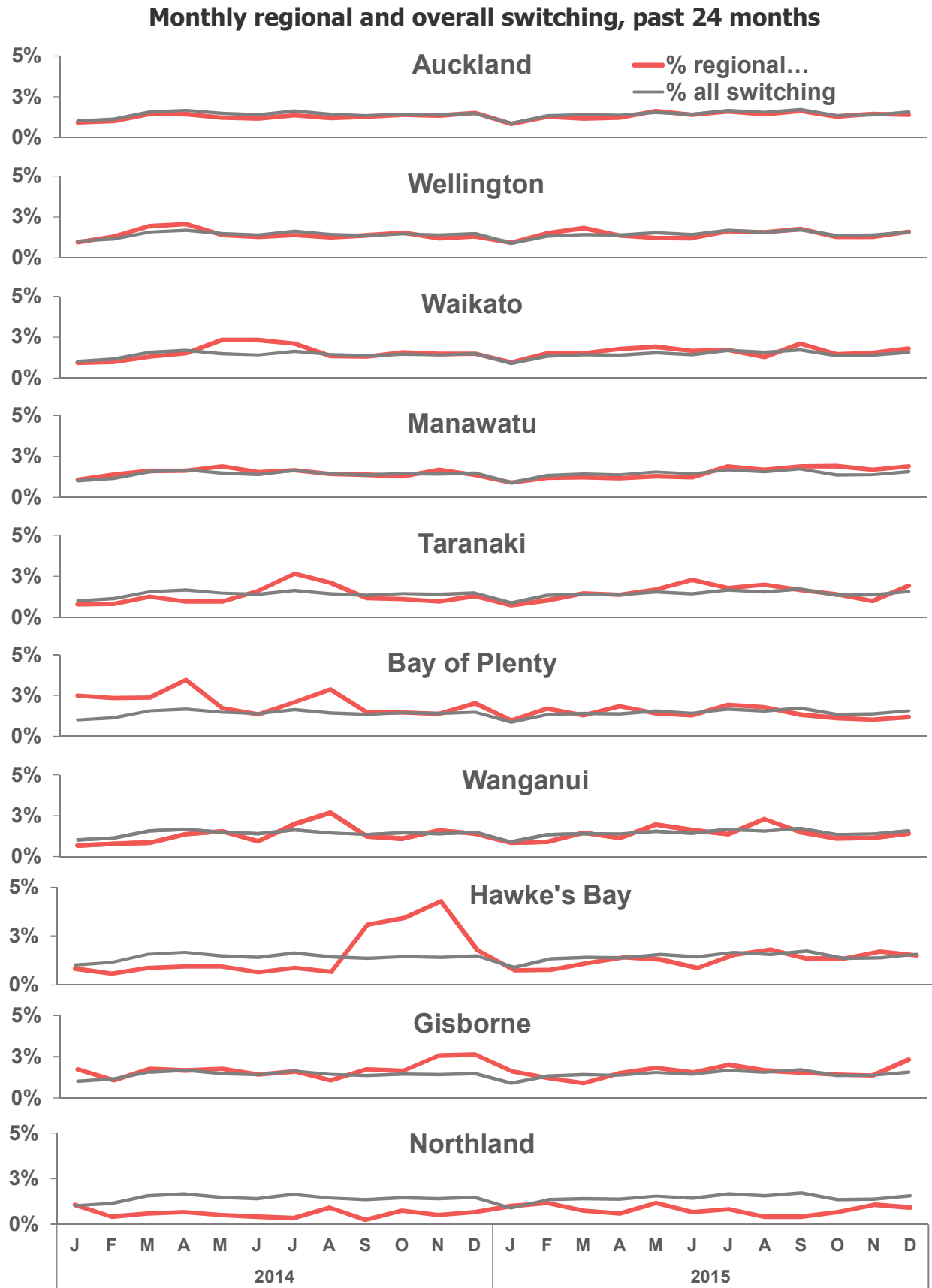
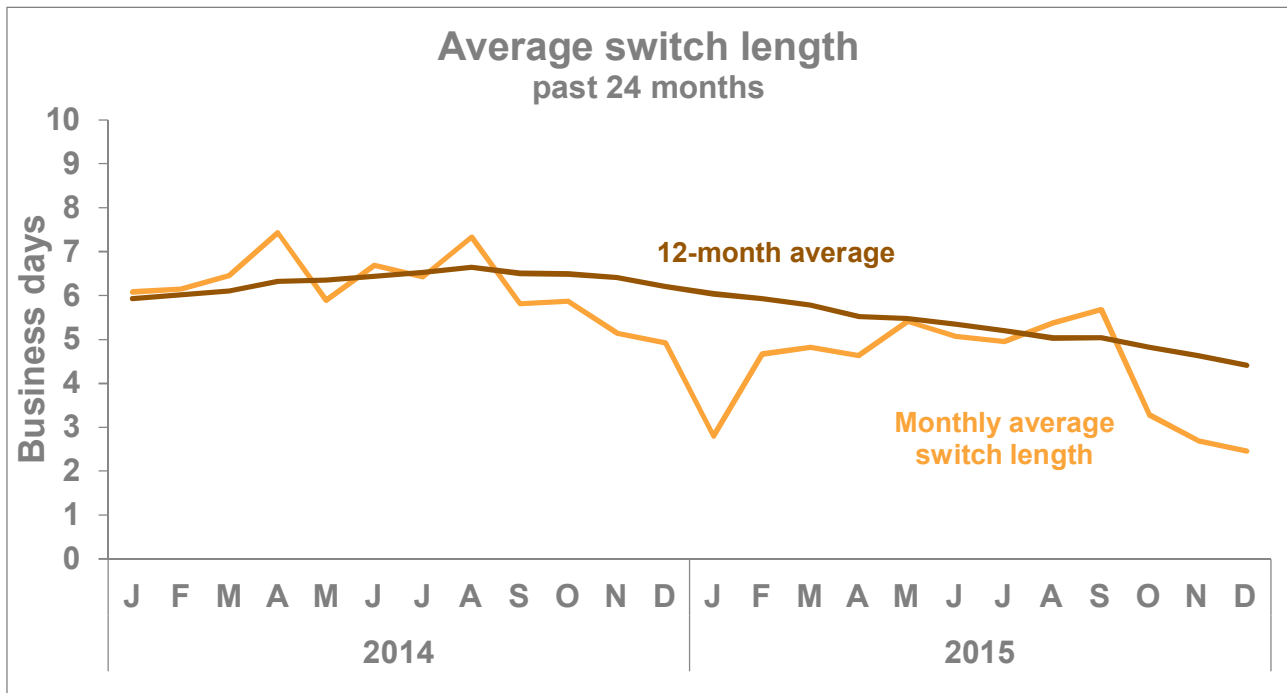
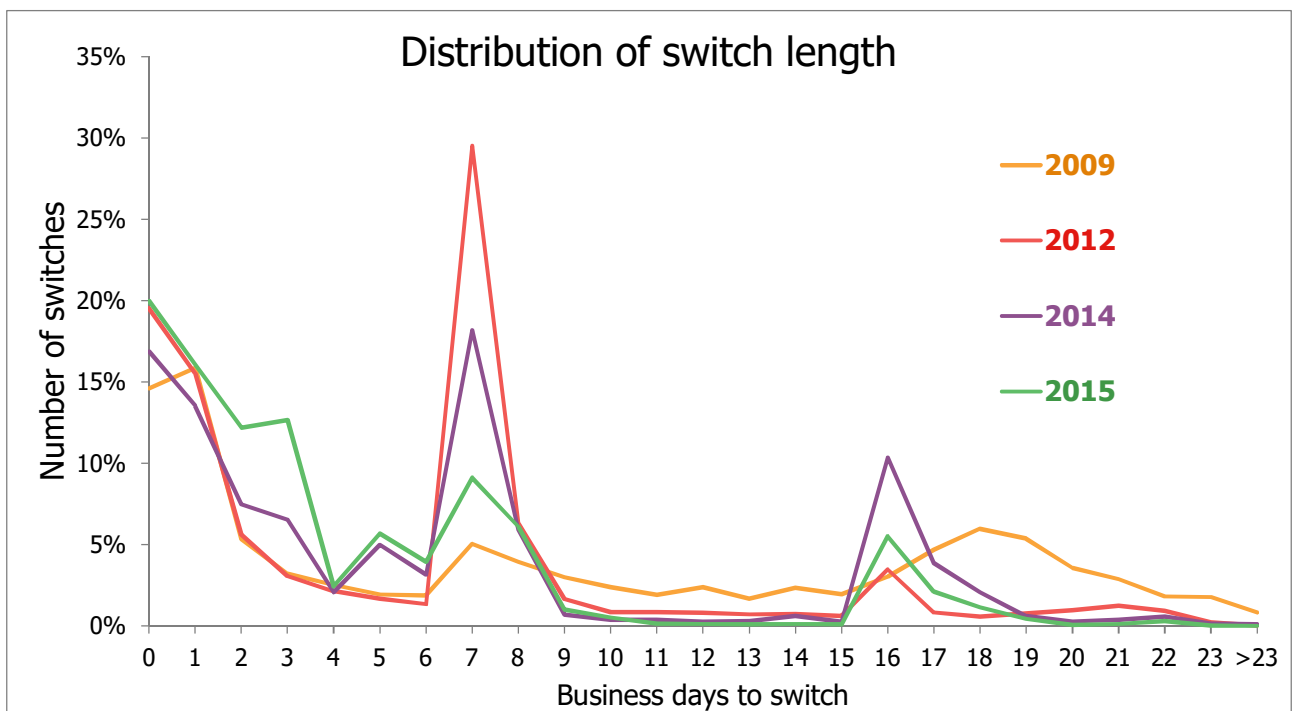


Chart 3: Time to process switches



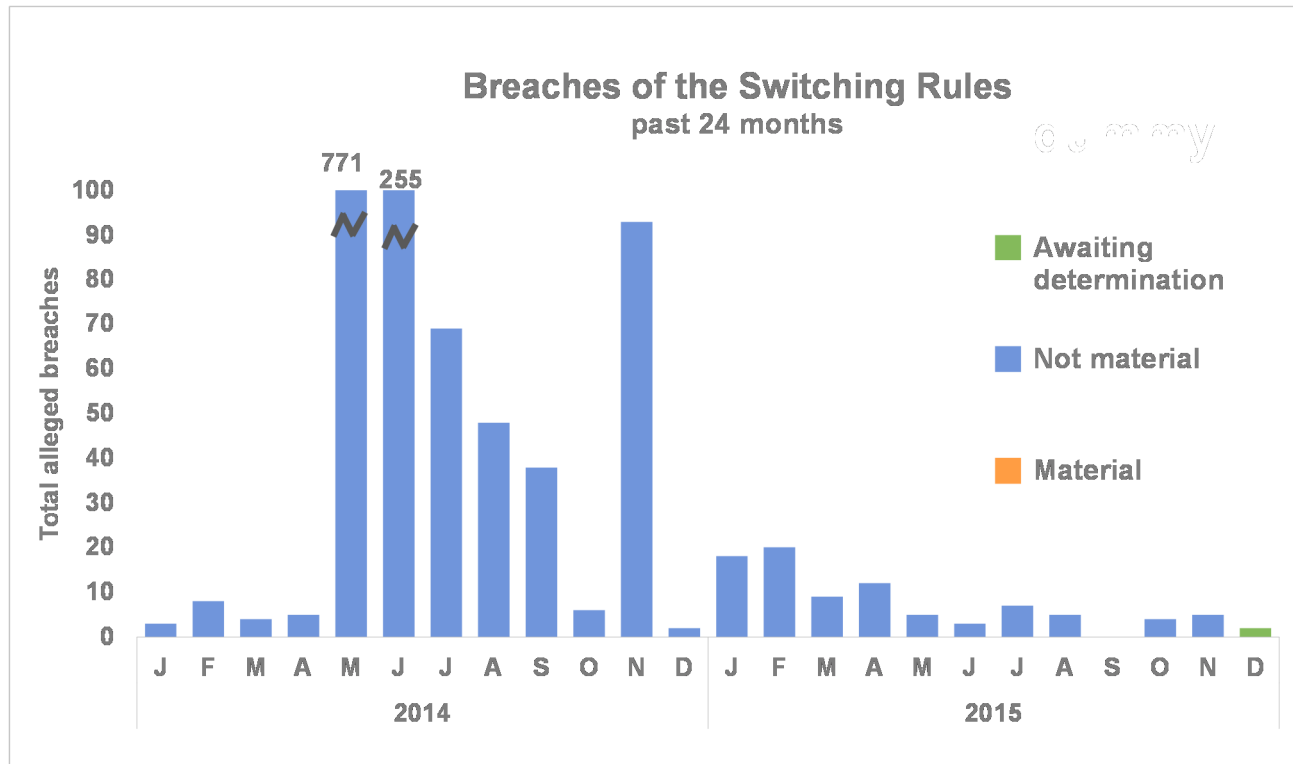
- December saw the fastest switching time since the start of the registry: on average, switches took 2.45 days to complete.
- The 12-month average switching time stands at about 4.4 days.

Chart 4: Distribution of switching length



This chart shows the distribution of switching times for the calendar years of 2009, 2012, 2014, and 2015. As the chart shows, switches are increasingly being completed within three days.

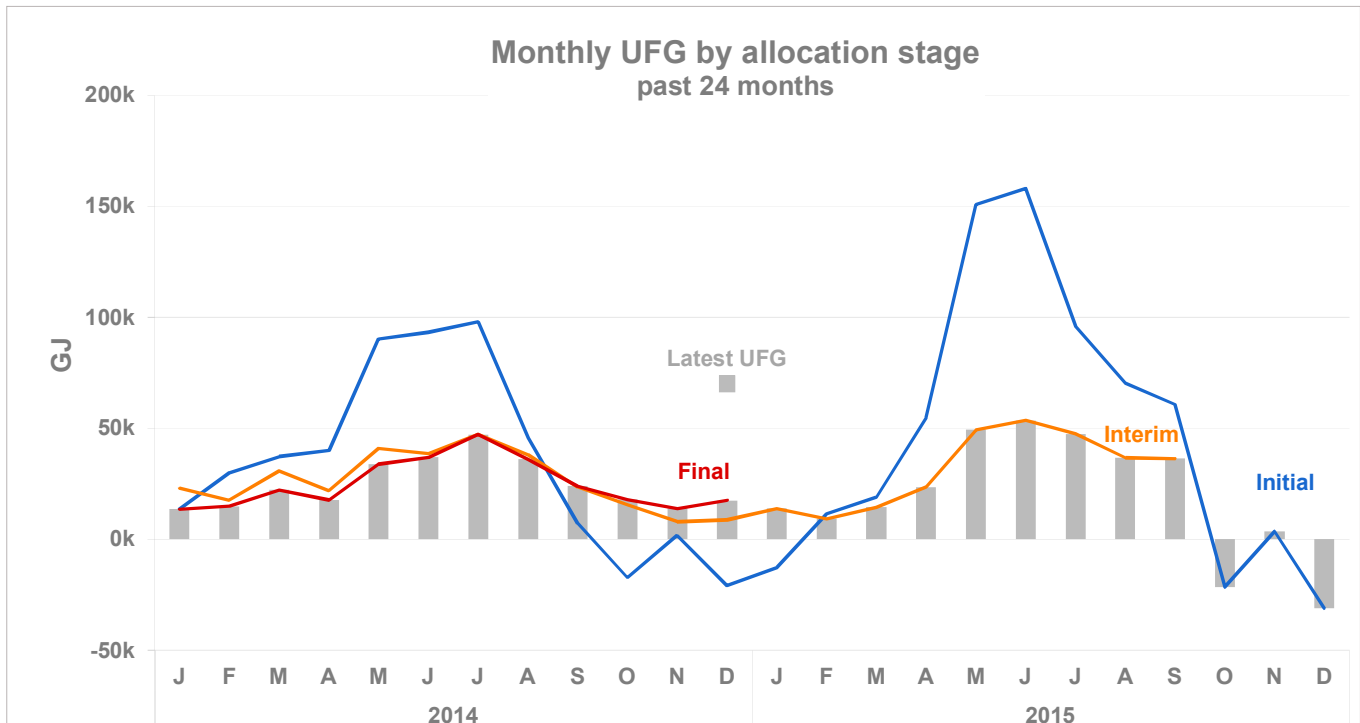
Chart 5: Number and severity of breaches of the Switching Rules



- Most of the breaches in May and June 2014 relate to delays in responding to switching notices by Contact Energy, when it was in the midst of its IT upgrade.
- No switching breaches were alleged for September 2015.

3 Allocation and reconciliation performance measures

Chart 6: Volumes of unaccounted-for gas (UFG)



- UFG has been negative in October and December 2015, consistent with trends in previous years. (see Chart A-2 in the appendix for a chart of UFG since the start of the Reconciliation Rules).

Chart 7: Percentage of UFG

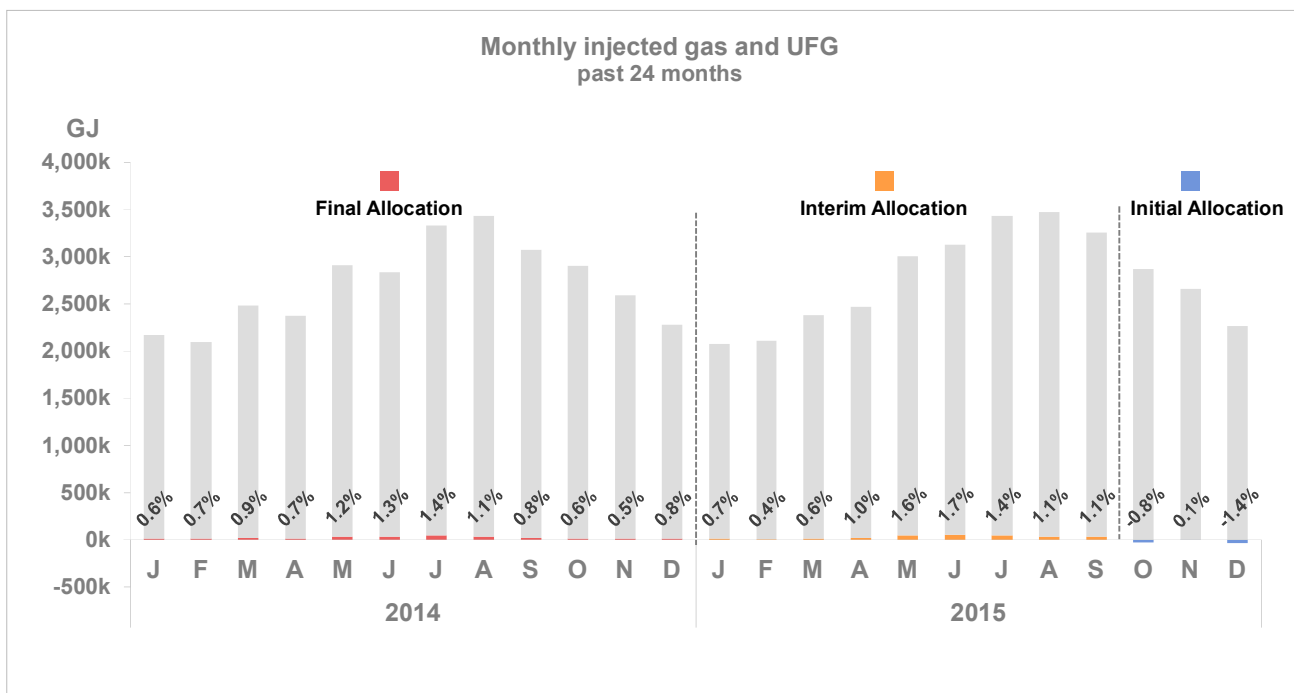
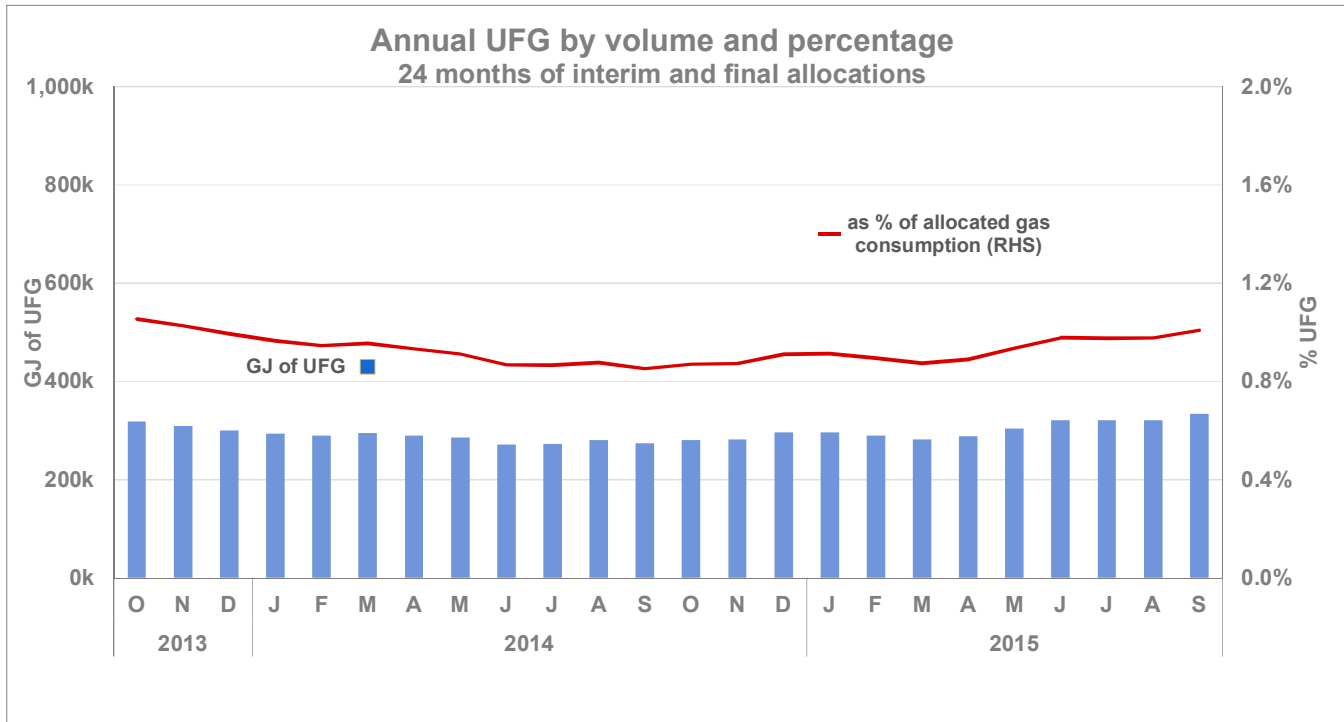
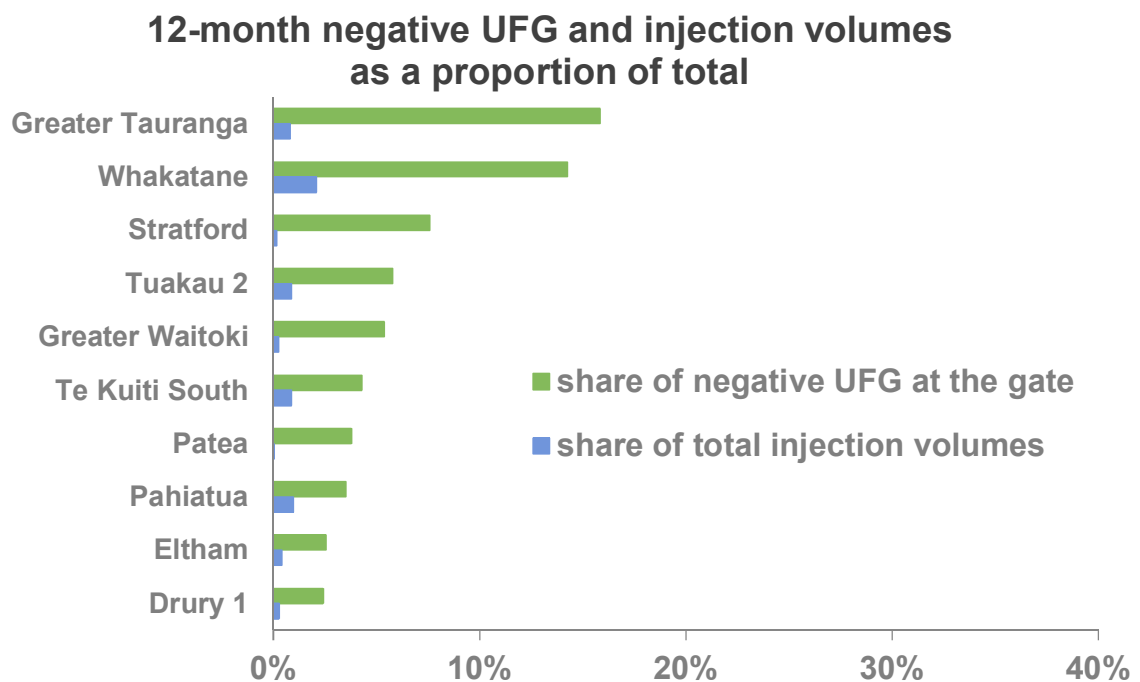
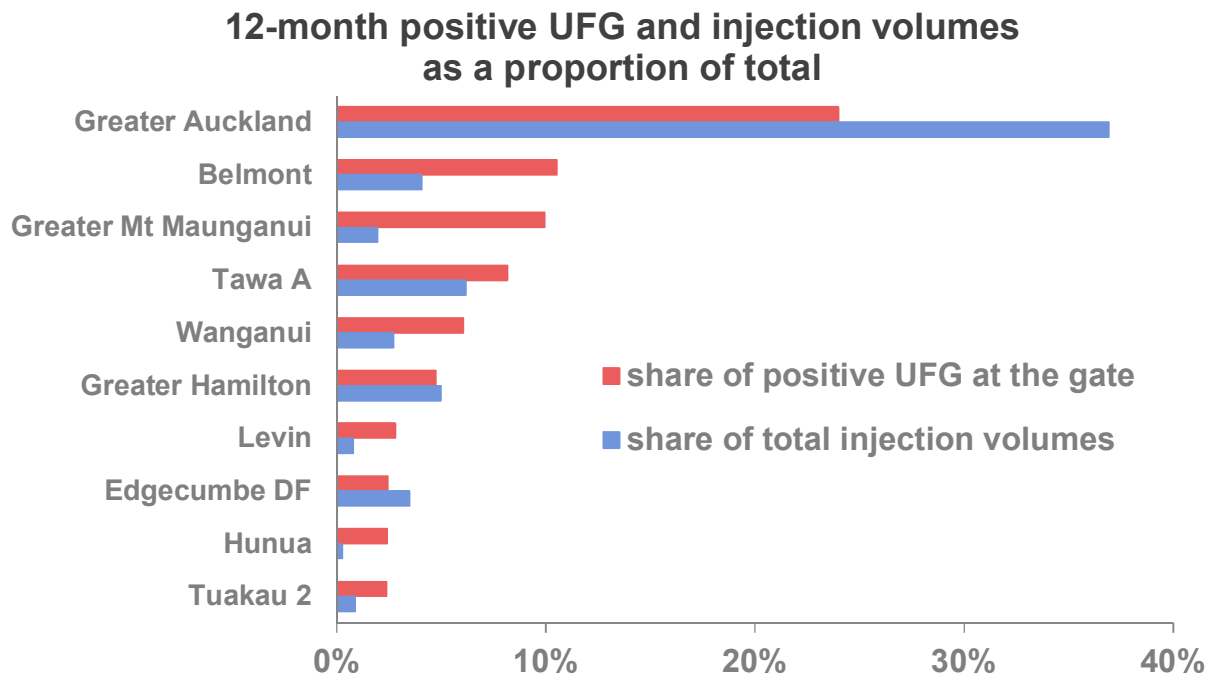


Chart 8: Rolling 12-month UFG



- In volume terms, annual UFG has halved since 2009, decreasing from about 600,000GJ per year to about 300,000 GJ. As a percentage of allocated gas, annual UFG has also halved, decreasing from about 2% per year to about 1%.

Chart 9: Gas gates where UFG is the highest

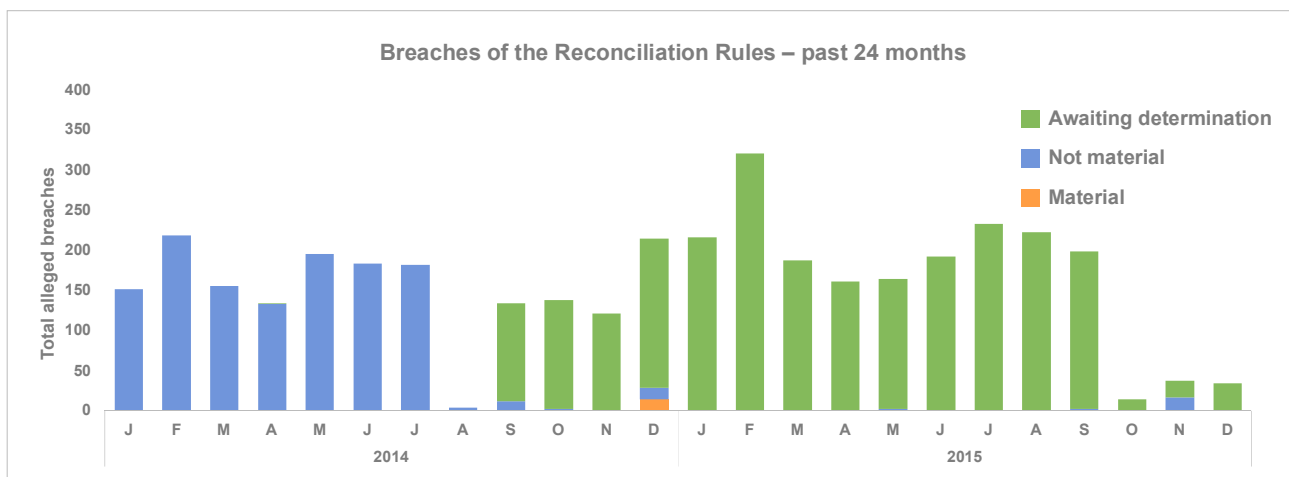


- These charts show the gates that experience the largest share of total UFG, compared to their share of total gas gate deliveries at shared gas gates. These charts use 12 months of the most

recent interim and final allocation data available: in this case, October 2014 through September 2015.

- The 10 gates shown in the top chart account for 74% – about 316,000 GJ – of the positive UFG experienced over the past 12 months.
- The 10 gates shown in the bottom chart account for about 65% (about 63,000 GJ) of the negative UFG experienced in the past 12 months. Six of the gas gates shown – Whakatane, Tuakau 2, Te Kuiti South, Pahiatua, Eltham, and Drury – have been determined to be global one-month gates, since, among other things, they have a high proportion of industrial load. The global one-month methodology assigns a share of the actual UFG experienced in a month to industrial consumers, in contrast to the usual calculation method, which assigns industrial load an annual average amount of UFG.

Chart 10: Number and severity of breaches of the Reconciliation Rules



- The very low level of alleged breaches in August 2014 can be attributed to the Allocation Agent omitting rule 37 breaches in its reporting that month. The Allocation Agent alleged the outstanding breaches in February 2015.
- Over 98% of alleged breaches of the Reconciliation Rules in the past year have occurred in relation to rule 37 – the rule that requires initial consumption information submitted by retailers to be within a percentage of accuracy of the consumption information submitted for the final allocation.
- It has proven efficient for the Market Investigator (or, more recently, Gas Industry Co) to attempt to reach a settlement on 12-month batches of rule 37 breaches, which is why there are a large number of breaches awaiting determination.

Audits commissioned

Event audits

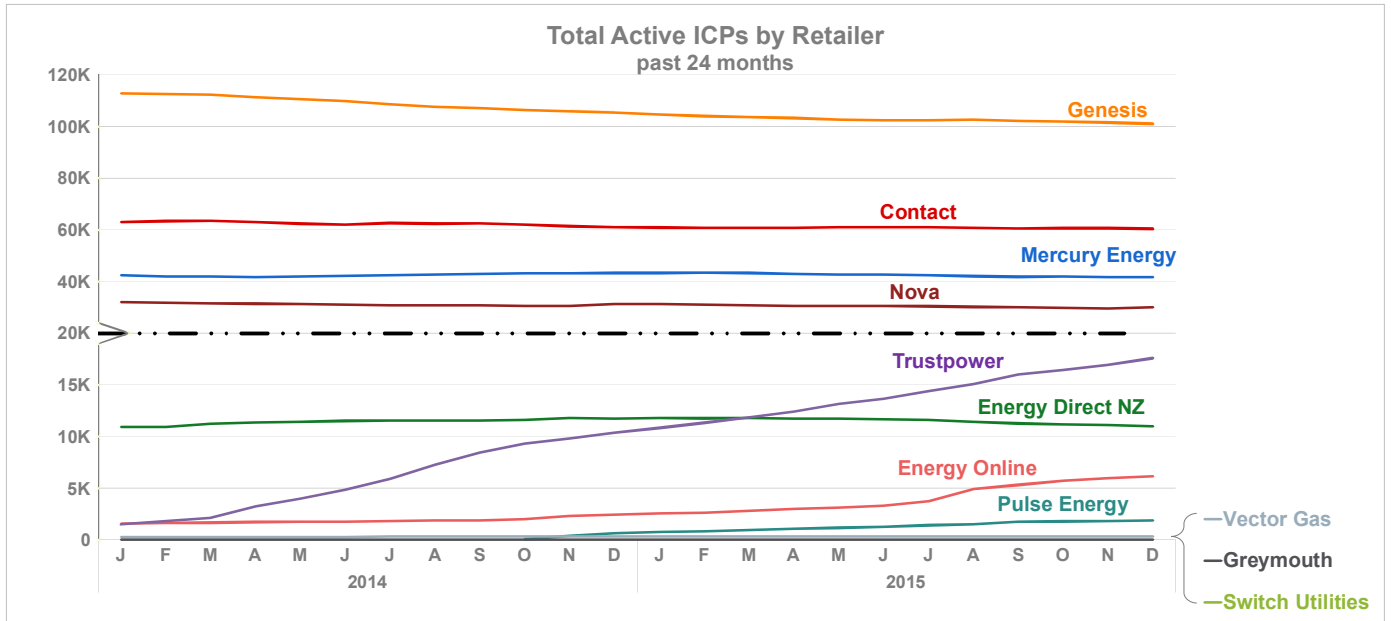
Gas Industry Co has commissioned an event audit to investigate the higher than average levels of UFG experienced at Greater Mt Maunganui (GMM08001) and Greater Tauranga (GTT07701). The auditor identified that the primary cause of higher than normal UFG at one gas gate and negative UFG at the other was due to a group of 152 ICPs that were associated with the wrong gas gate. There was also a small number of ICPs that were outside of the Bay of Plenty region that had been allocated to one or other of these gas gates. Those errors are being fixed by the gas distributor. The auditor estimated that correcting the ICP allocations would have reduced the negative UFG at Greater Tauranga by 1,394 GJ in the September consumption period (and the Greater Mt Maunganui UFG by a corresponding amount).

Performance audits

The second round of retailer performance audits is complete and audit reports are available on the Gas Industry Co website.

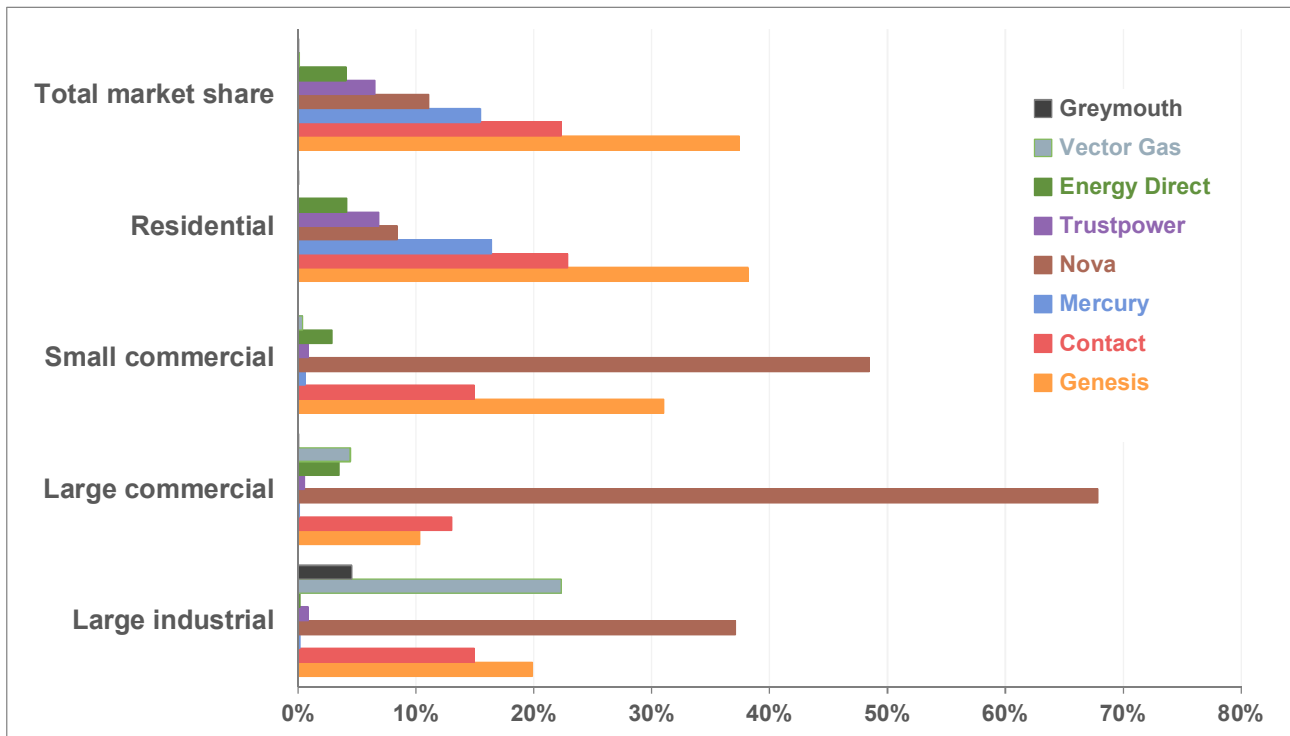
4 Market competition performance measures

Chart 11: Market share of ICPs by retailer



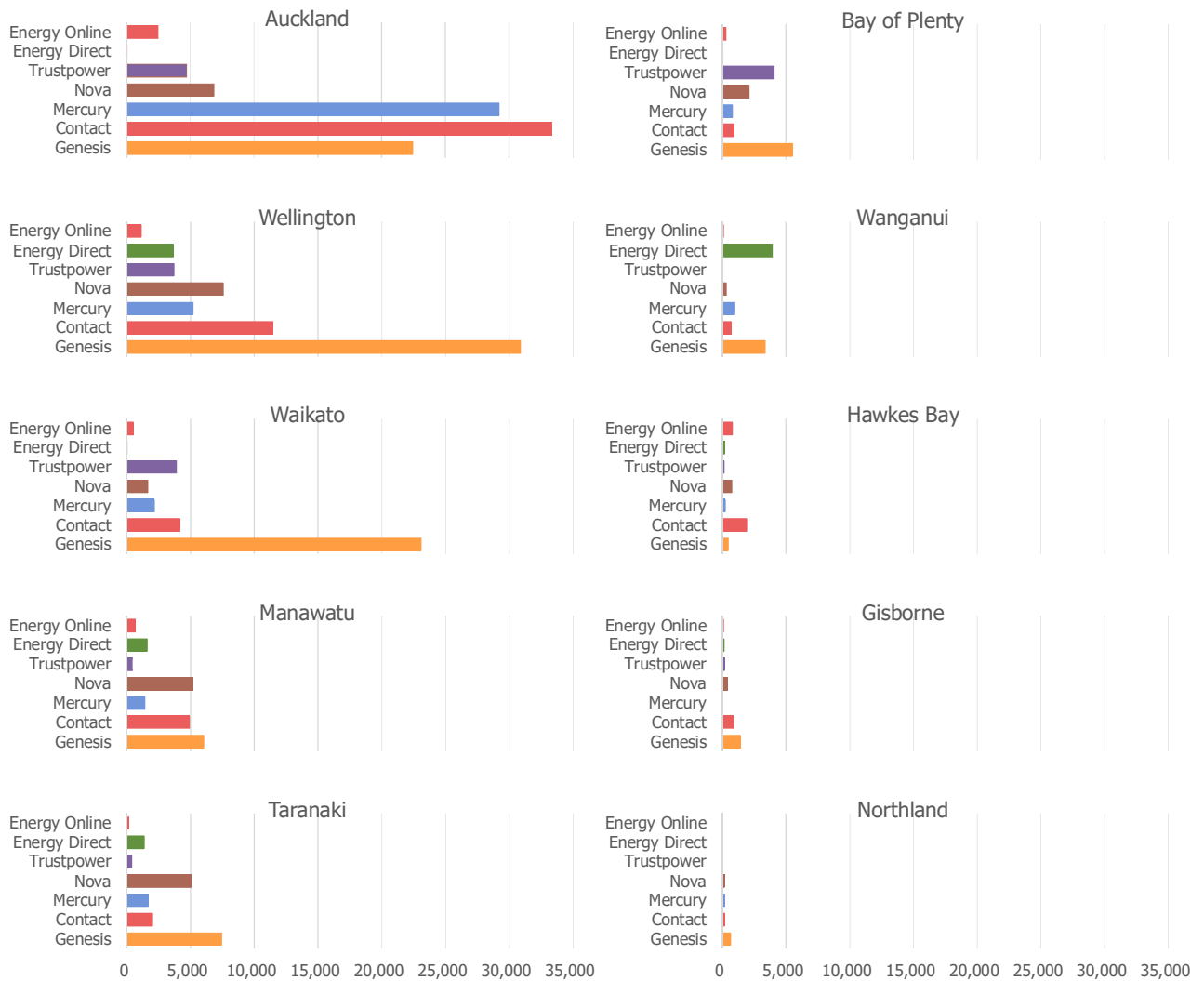
- There have been a number of new entrants to the retail gas market in the past few years:
 - Switch Utilities in July 2015;
 - Pulse Energy in October 2014; and
 - Trustpower in November 2013, following the company's acquisition of Energy Direct in July 2013.
- There are now 11 distinct retail brands, owned by nine different retail companies (Energy Direct is owned by Trustpower; Energy Online is owned by Genesis Energy).

Chart 12: Customer market share by consumer segment



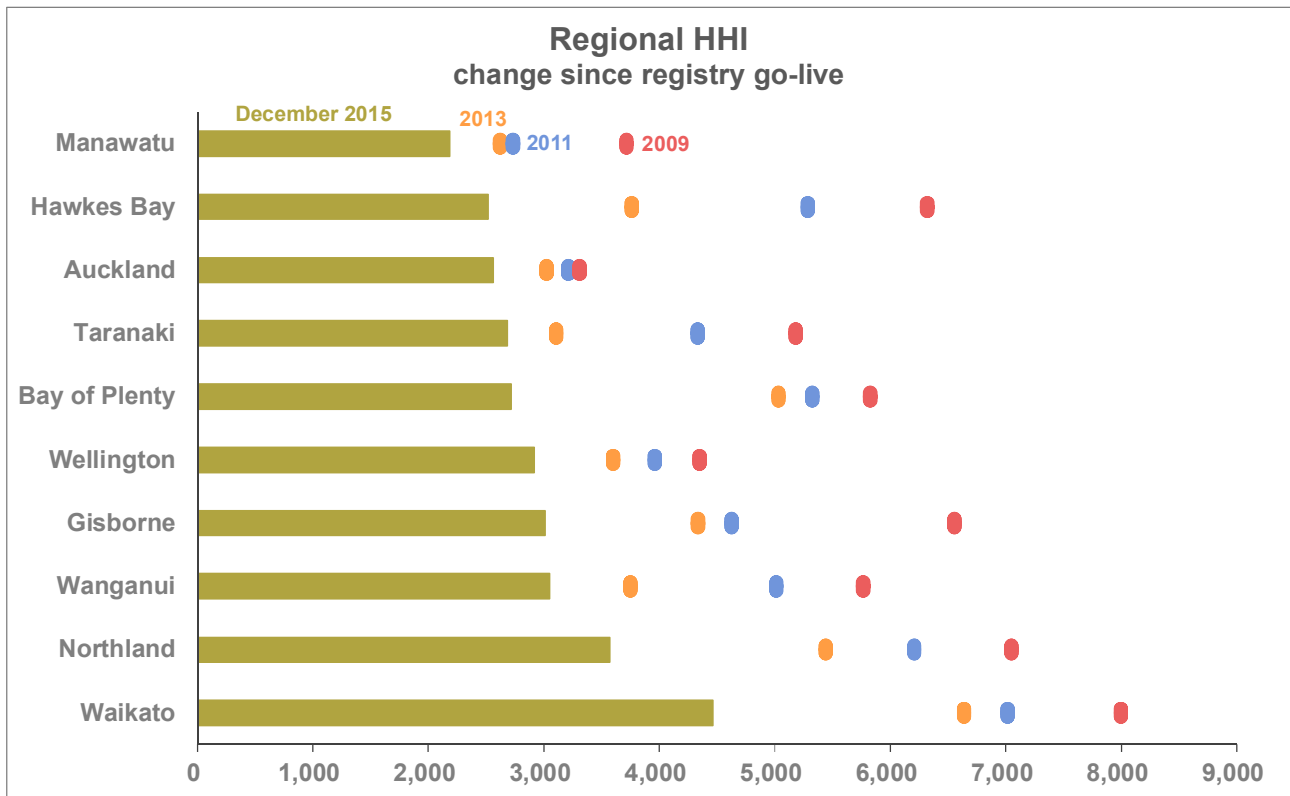
- In this chart, consumer segment is determined by the load shedding category listed on the gas registry for each consumer site.
- The chart includes the retail brands that have more than 3% of market share in a category. Energy Online, Pulse Energy, and Switch Utilities, with 2.4%, 0.7%, and 0.004% of the residential market, respectively, are not shown on the chart.

Chart 12a: Customer market share by region



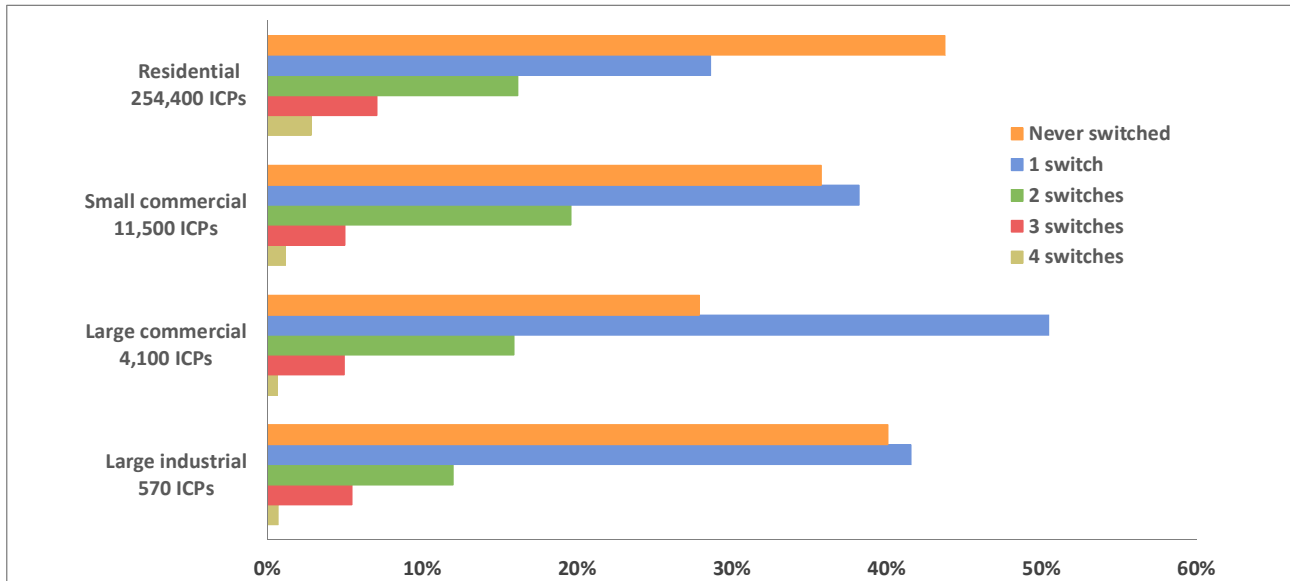
- This chart shows the number of ICPs for each retailer in each geographical region. The retailers shown each have over 1% of total customer market share.

Chart 13: Herfindahl–Hirschman Index (HHI)



- The HHI has decreased in all regions since 2009, indicating that the retail market is becoming less concentrated across the North Island.
- Nationally, the HHI stands at 2,322, in comparison to 3,033 in February 2009 (the start of the registry).

Chart 14: Switching by consumer sites since 2008

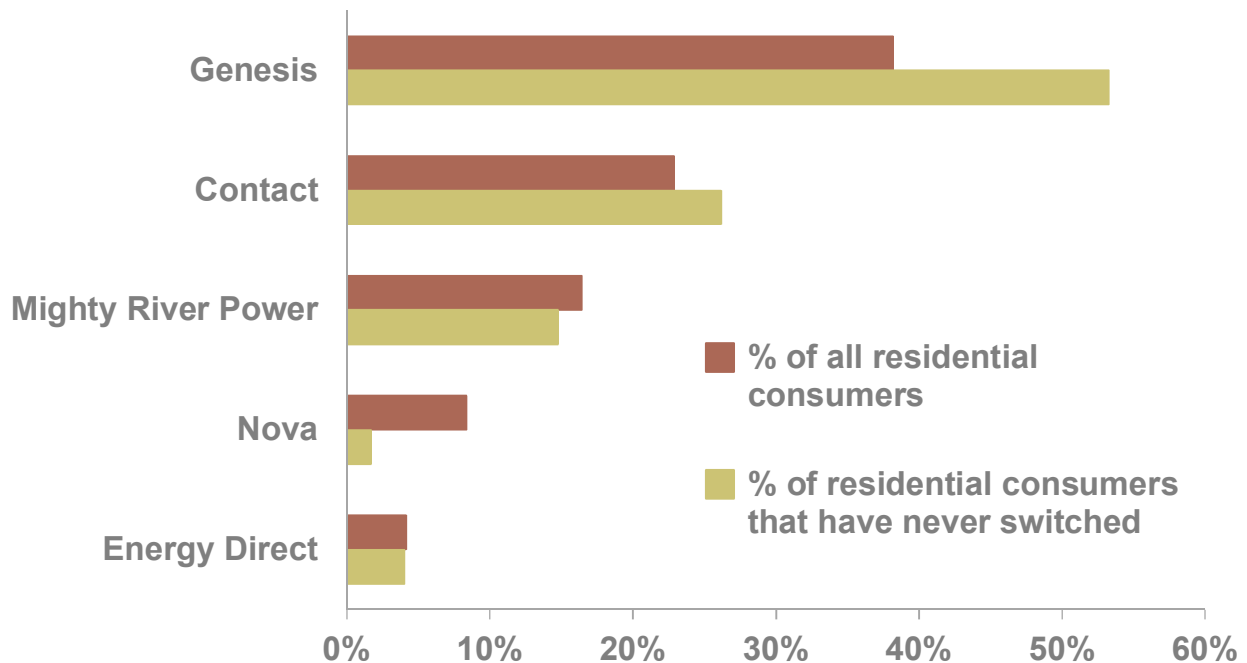


As with Chart 12, consumer sites in this chart and Chart 15 are categorised based on the load shedding category recorded in the gas registry.

- 56% of residential consumer sites
- 64% of small commercial sites
- 72% of large commercial sites; and
- 60% of large industrial sites

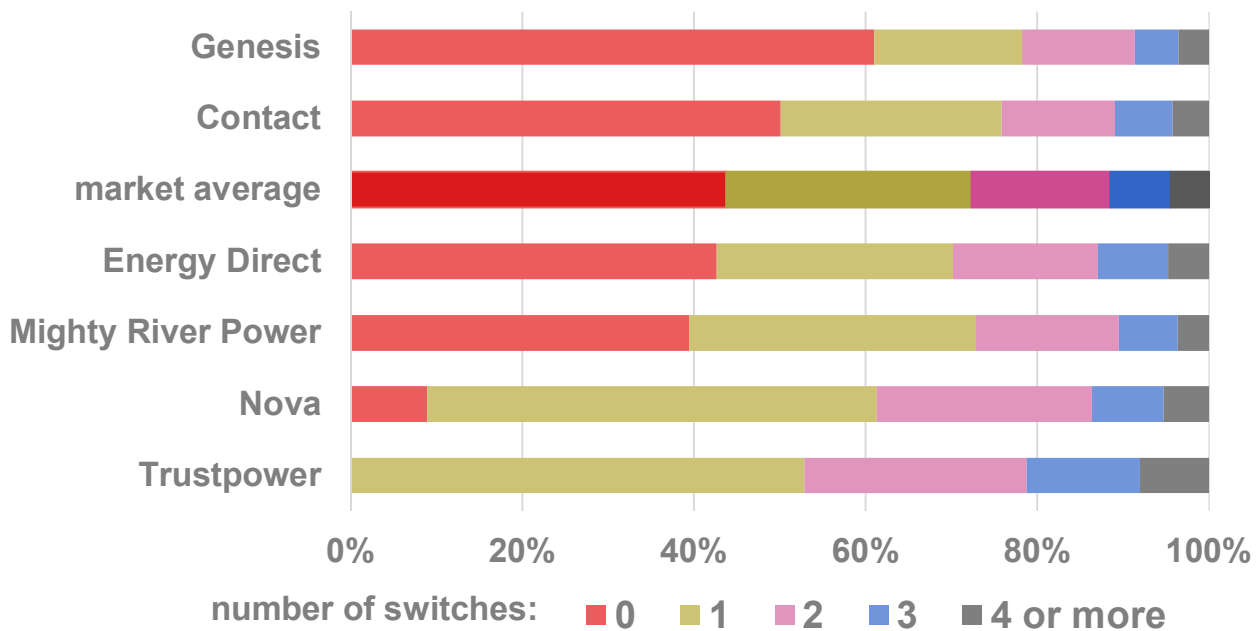
have switched retailer at least once since the start of the gas registry (March 2009).

Chart 15: Residential consumer sites that have never switched



- This chart compares retailers' market share of all residential consumers with their share of residential consumers that have never switched. It shows, for example, that Genesis has about 38% of the total residential market, and about 53% of the residential consumers that have not switched retailer since the start of the gas registry in March 2008.
- The chart excludes Trustpower, Pulse Energy, and Switch Utilities, as all of their customers have made at least one retailer switch.

Chart 15a: Residential customers by number of switches



- This chart provides another way to think about residential customer switching. The third bar repeats the data on residential switches from chart 14 above: 44% of residential consumer sites have never switched retailer; 29% have switched once; 16% have switched twice; 7% three times, and 3% four times.
- The other bars enable comparison with retailers' residential customer bases. 61% of Genesis customers, for example, have never switched; the proportion is 50% for Contact customers.
- In contrast, Trustpower has built its customer base entirely through switching: 53% of its customers have switched once; 26% twice; and 13% three times.

Chart 16: Switching activity by retailer

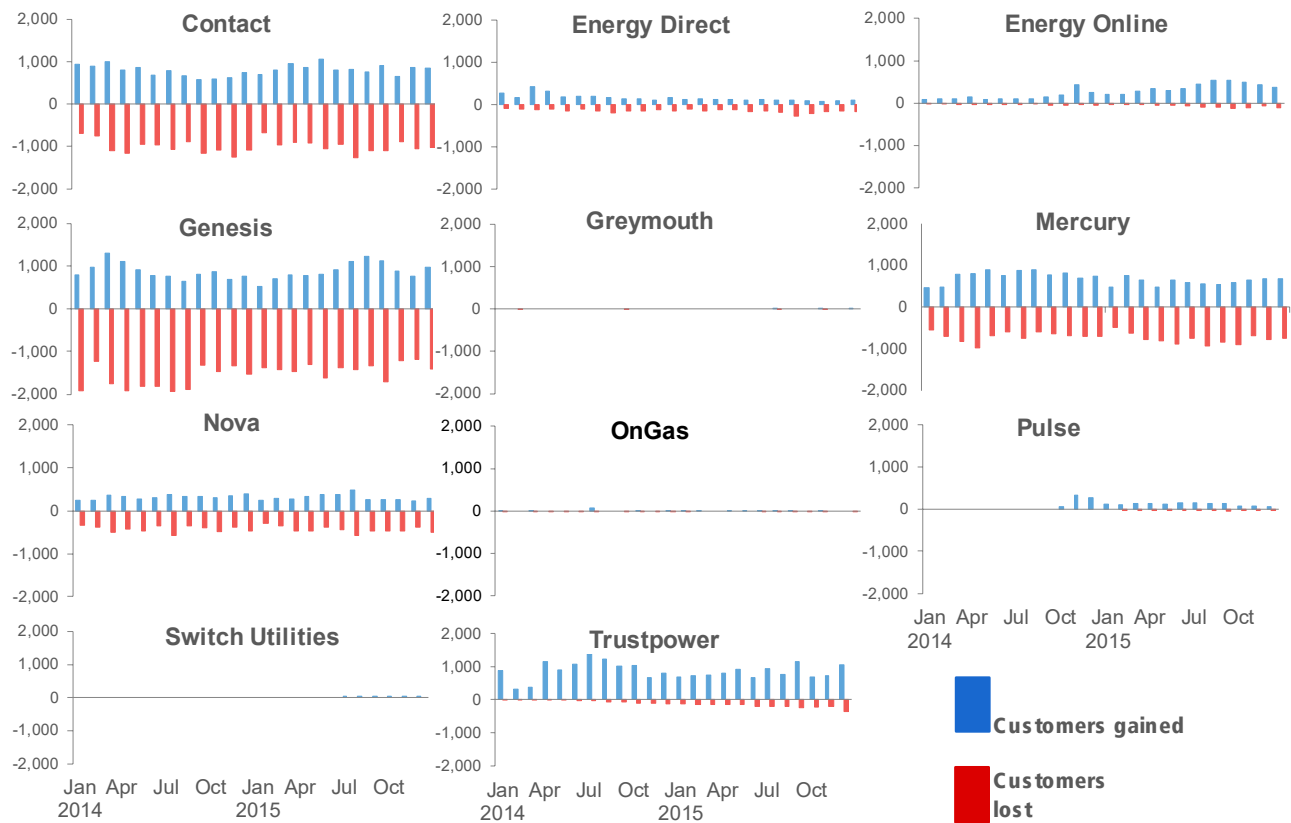
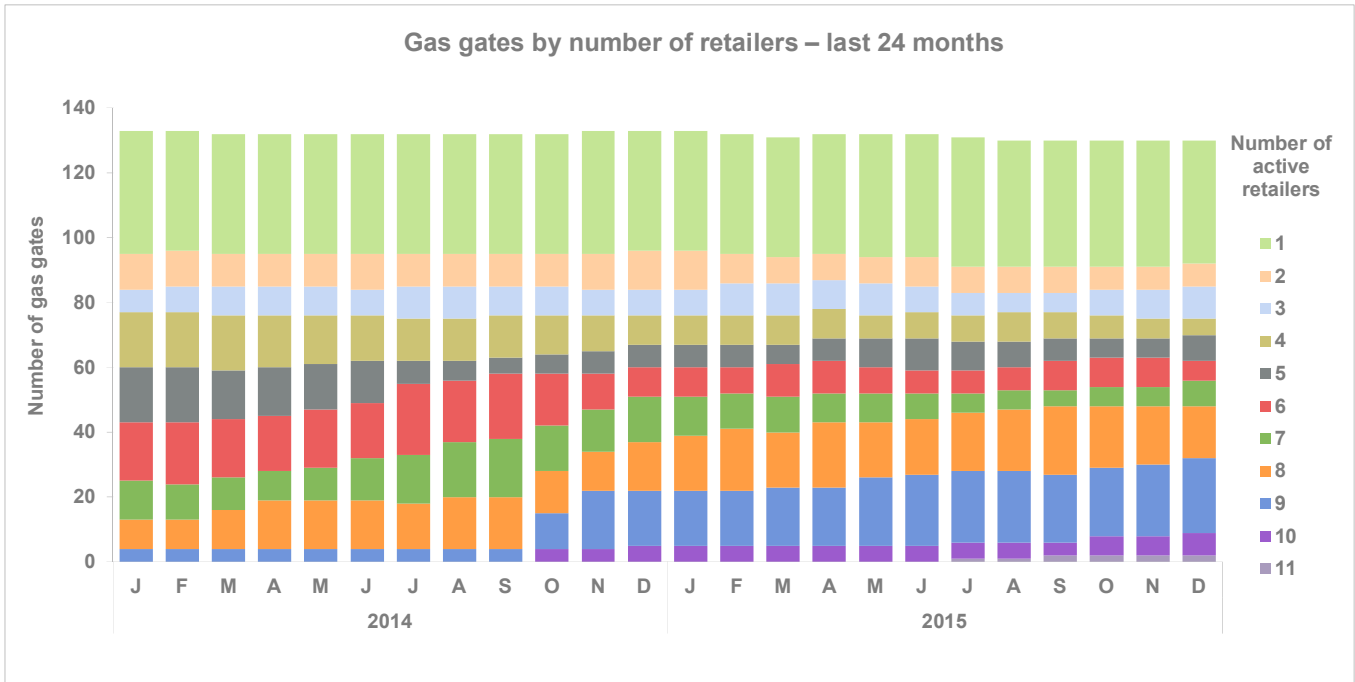
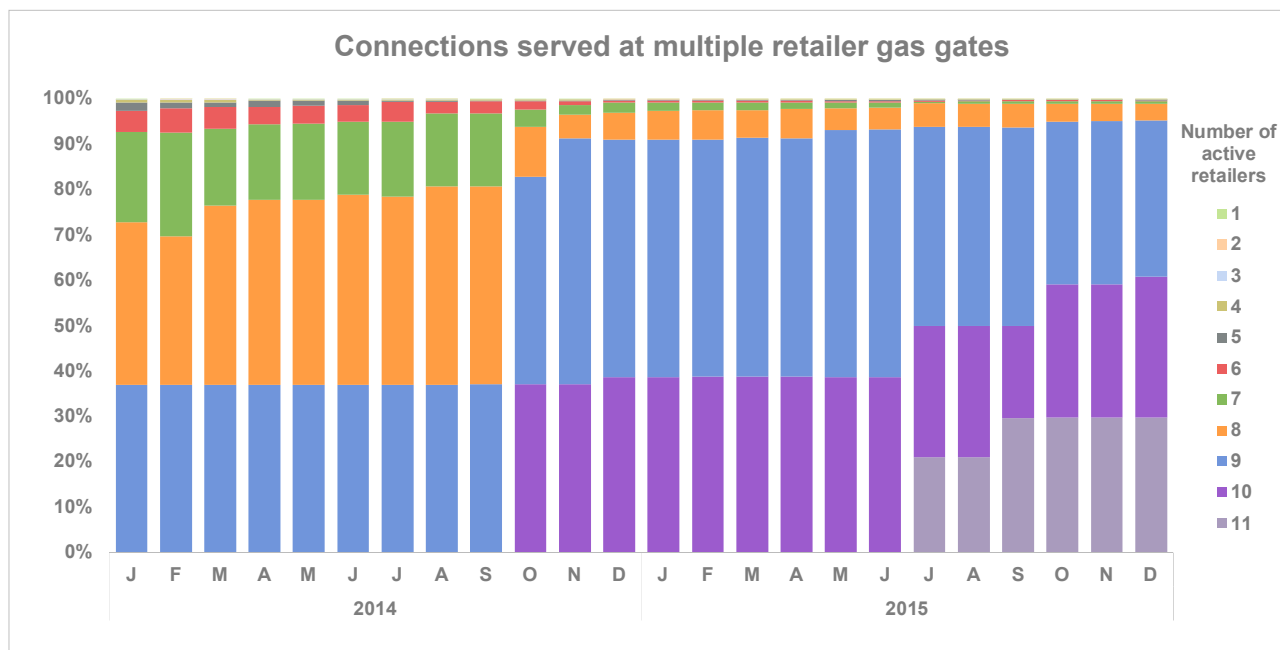


Chart 17: Gas gates by number of retailers



- Due to Switch Utilities entering the retail gas market in July 2015, there are now 11 retailers trading at some gas gates. The gates with all 11 retailers are in the Greater Auckland area.
- The chart also shows the step change due to Pulse Energy's entry into the retail gas market in October 2014.

Chart 18: Connections served by multiple retailers



- Nearly 99% of gas consumers are connected to a gate where eight or more retailers trade.

Chart 19: Total gas volumes

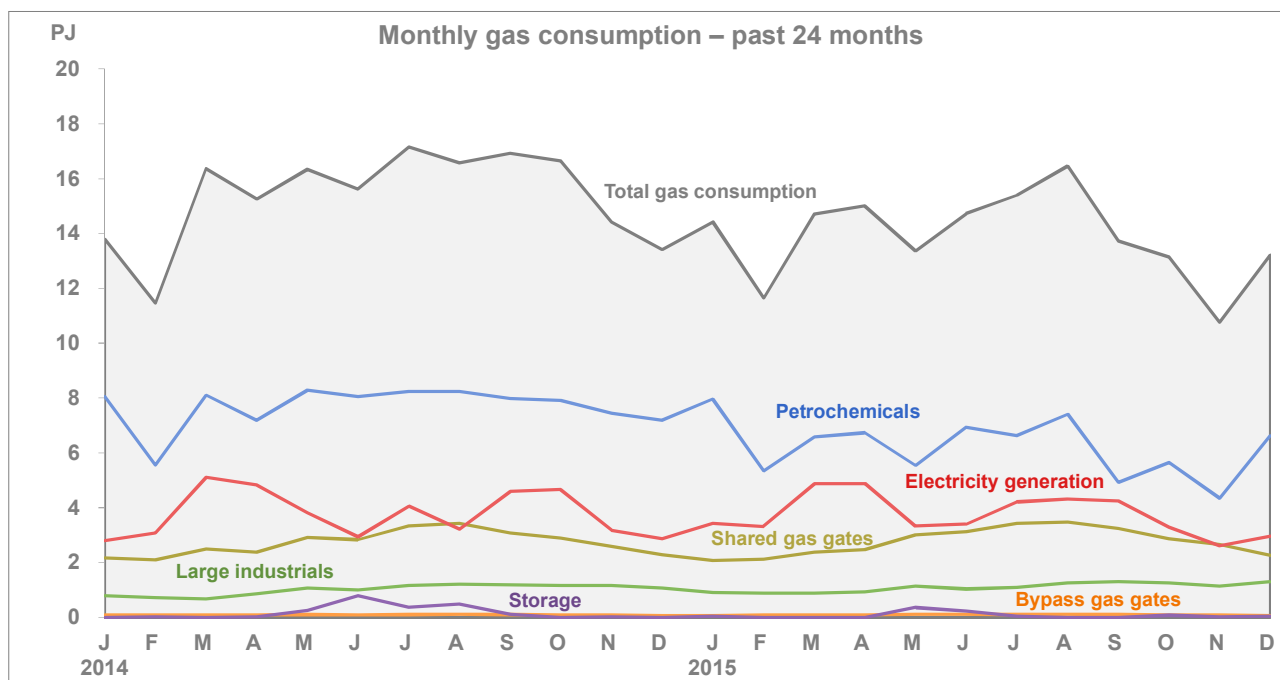
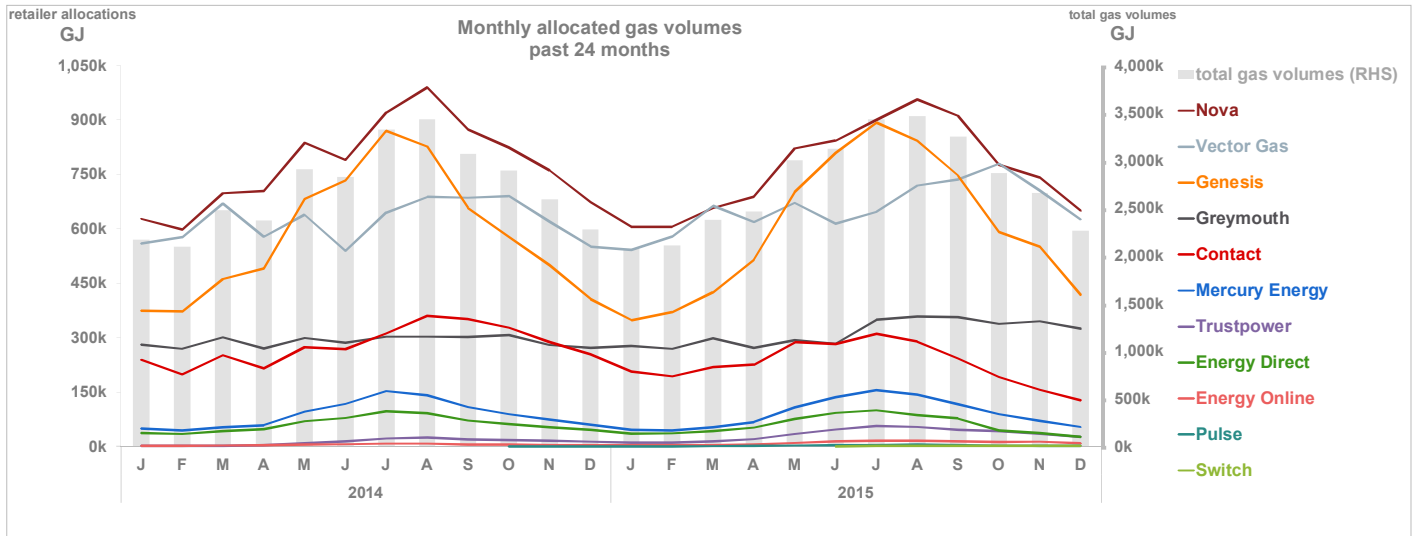


Chart 20: Allocated gas volumes



- The data are from a mix of allocation stages: Final through December 2014; Interim for January 2015 through September 2015; and Initial for October through December 2015.

Chart 21: Balancing gas volumes

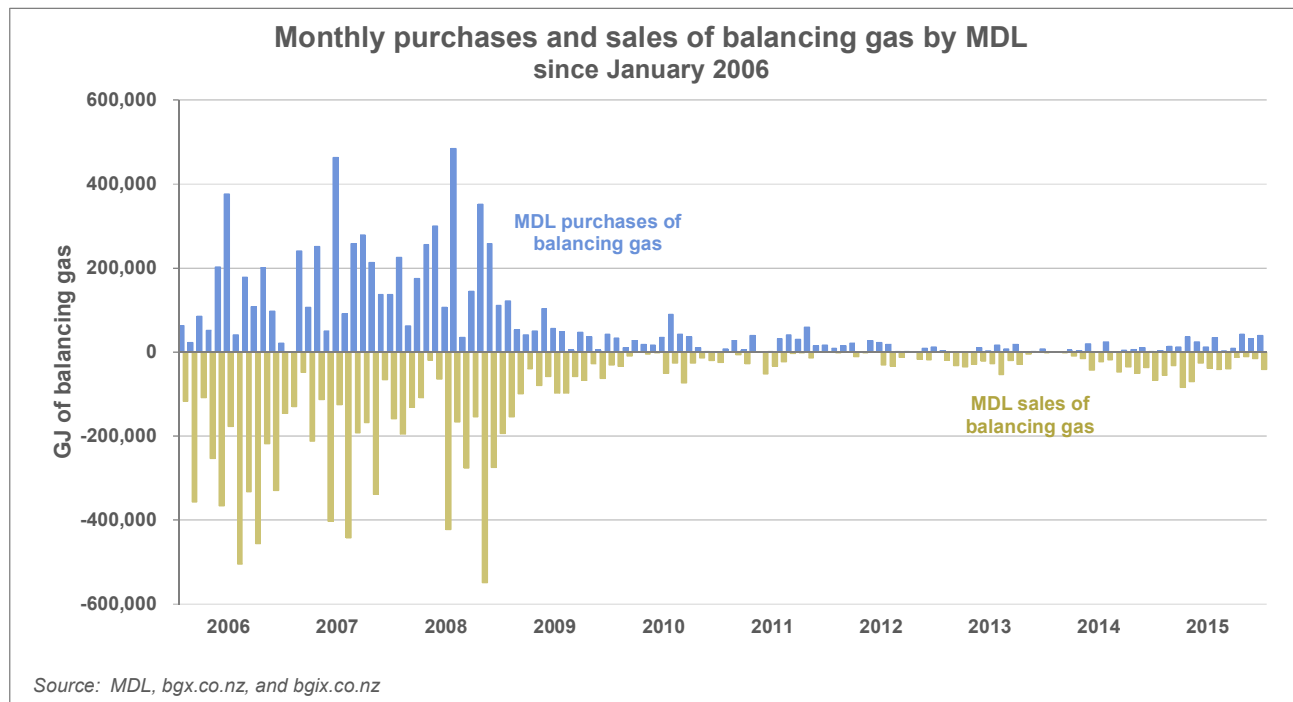
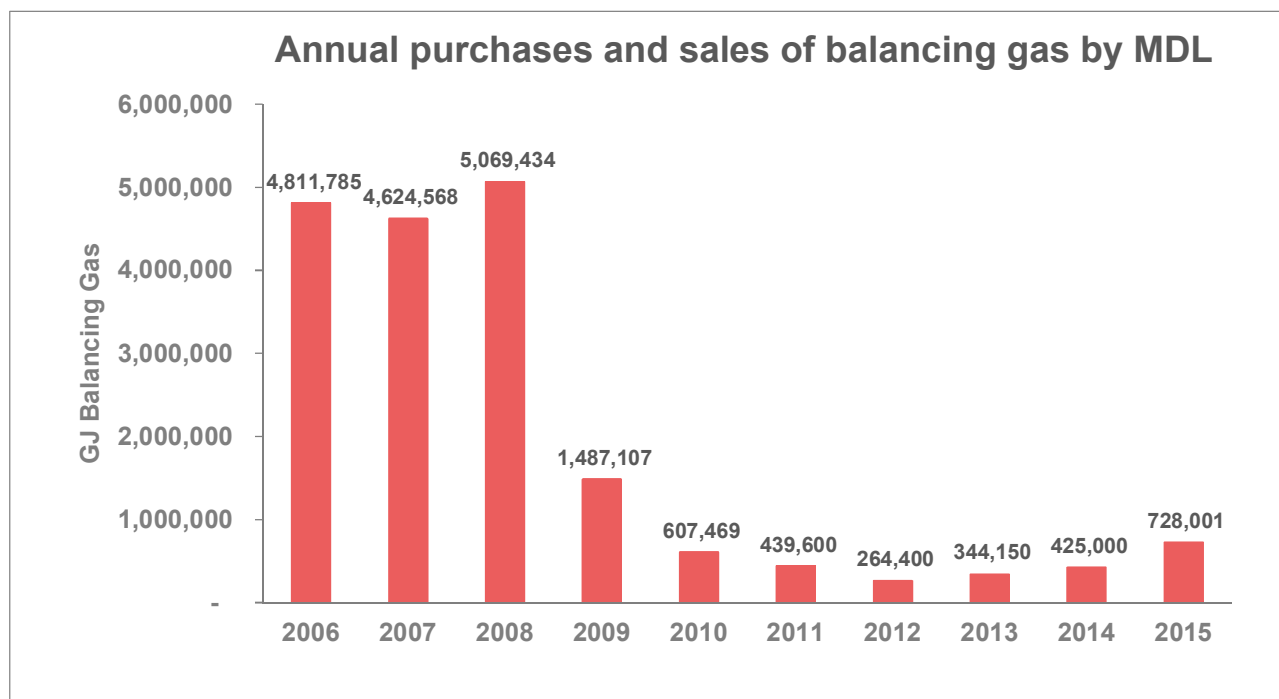


Chart 22: Annual volumes of balancing gas



October 2015 saw the first month of Market Based Balancing (MBB). This new set of arrangements is designed to more accurately target the costs of secondary balancing (i.e. balancing undertaken by the transmission operator) to parties who are out of balance. Given that the new system has had little time to settle down and for the pipeline users to become familiar with it, it is too early to draw any conclusions on its effectiveness. However, as the transmission operator is required to “cash-out” excess imbalance on a daily basis it is likely that we shall see an uptick in secondary balancing activity. That change may explain the increase in the 2015 purchases and sales of balancing gas by MDL in Chart 22.

5 Critical Contingency Management performance measures

There were no critical contingencies in the previous quarter.

Glossary

Critical contingency	A state of emergency on the transmission system characterised by falling or extremely low gas pressures. In such situations, the critical contingency operator has the authority to require consumers to stop using gas in order to balance the system, as set out in the Gas Governance (Critical Contingency Management) Regulations 2008.
Direct connect consumers	Large industrial consumers who are supplied gas directly from the transmission system via a dedicated gas gate.
Distribution system	System of lower pressure pipelines conveying gas from the transmission system to consumer sites.
Gas gate	A place where gas leaves the transmission system. Gas gates (most commonly) lead to distribution systems, which supply a number of different consumers. Some gas gates are direct connects, meaning that they supply a single large industrial consumer. A few gas gates supply private gas networks, which supply the customers of a single retailer.
Herfindahl–Hirschman Index (HHI)	Measure of market concentration. Generally, markets in which the HHI is between 1,500 and 2,500 are considered moderately concentrated. Markets with an HHI of greater than 2,500 are considered highly concentrated. For more information, see the Appendix.
ICP	Installation Control Point: the point where a consumer installation is connected to the distribution system. Used to describe a consumer site.
Move switch	A switch where the retailer supplying gas to a consumer site is changed to another retailer at the request of an incoming tenant or homeowner.

Reconciliation	The processes by which the volume of gas leaving the transmission system is allocated on a gate-by-gate basis to retailers with consumers at those gates; governed by the Gas (Downstream Reconciliation) Rules 2008. Reconciliation is done on a monthly basis, and each consumption month is calculated three times: in the month immediately after consumption month (<i>initial allocation</i>); four months after consumption month (<i>interim allocation</i>); and 13 months after consumption month (<i>final allocation</i>).
Registry	Database of information on consumer sites, including metering information, associated gas gate, and responsible retailer. Used to facilitate efficient and accurate switching.
Standard switch	A switch where a gas customer decides to switch the retailer that supplies its existing location.
Switching	The processes by which the retailer supplying a customer site is changed to another retailer, governed by the Gas (Switching Arrangements) Rules 2008.
Transmission system	System of high pressure pipelines that convey gas from gas processing facilities to a distribution system or to a direct connect consumer.
Unaccounted-for gas (UFG)	The difference between the amount of gas leaving the transmission system and retailers' estimates of their consumers' consumption. It is made up of technical losses on the system, metering inaccuracies, and retailer estimation errors. For more information, see the Appendix.