

Performance Measures Quarterly Report for the period ending 30 September 2011

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 2009 (the Reconciliation Rules), and the Gas Governance (Critical Contingency Management) Regulations 2008 (CCM Regulations), both in terms of activity related to these statutes and the competitive outcomes that they foster.

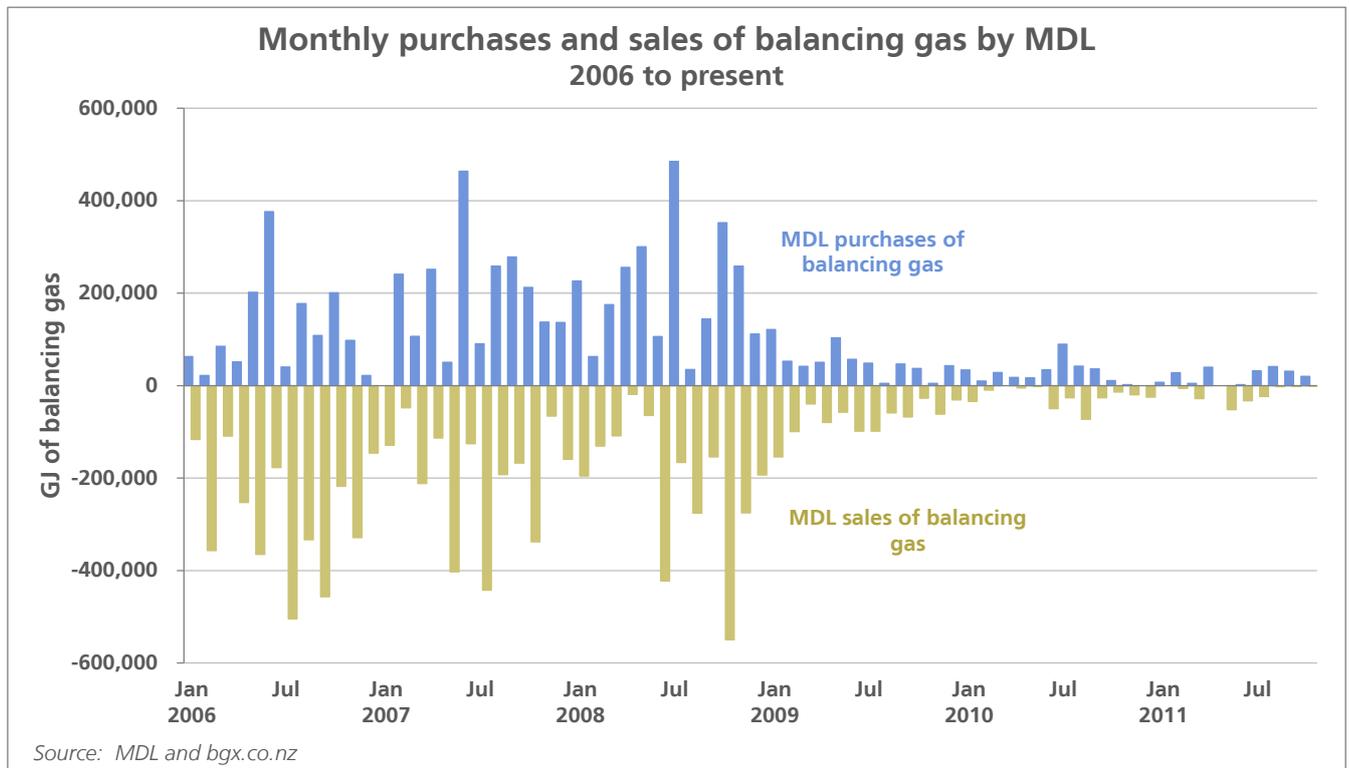
Highlights of the Report:

- Balancing gas volumes have continued to fall in calendar 2011 compared to previous years. Balancing volumes fell 87% from calendar 2006 to 2010; comparison of the first nine months of 2011 with the same time period in 2010 shows a further decrease of 38% in gas volumes.
- Switching volumes in September have reverted to historical levels, following several months of heightened switching activity. The average annual switching rate is about 15.5%.
- Annual volumes of unaccounted-for gas (UFG) stand at about 1.4% of allocated volumes. UFG had an uptick over the winter months, consistent with previous years, but UFG for September is unseasonably low.
- There have been no major movements in market share this quarter. Genesis Energy is the largest gas retailer by number of customers; Nova Energy is the largest by volumes of allocated gas.
- Consistent with last quarter, over 93% of gas customers are connected to gas gates where six or more retailers operate.
- There were no critical contingencies this quarter.

2 Balancing gas volumes

Gas Industry Co is monitoring developments in the balancing market with a view to providing advice to the Minister in February 2012. Balancing refers to the management of the gas inventory in a pipeline. The volume of gas in a pipeline relates to the gas pressure in the pipeline and needs to be maintained below the safe operating pressure limit for the pipeline and above the minimum required to maintain the supply of gas to consumers. On the Maui pipeline, pressures will rise or fall as parties who inject gas into the pipeline over- or under-inject and as parties who receive gas from the pipeline under- or over-take relative to their respective scheduled volumes. MDL buys and sells balancing gas in order to manage gas volumes and thus maintain gas pressure within safety and operational limits.

Prior to 2008, balancing services were essentially free to holders of legacy Maui gas contracts, but changes implemented at the end of 2008 to the Maui Pipeline Operating Code have meant that interconnected parties and gas shippers are now responsible for imbalances that they create. In 2009, MDL instituted the Balancing Gas Exchange, an online platform that displays pipeline balance conditions and enables gas producers and wholesale gas consumers to post offers to buy and sell balancing gas. These two changes appear to have provided gas transmission customers with an incentive to self-balance and greater information on which to base their balancing decisions.



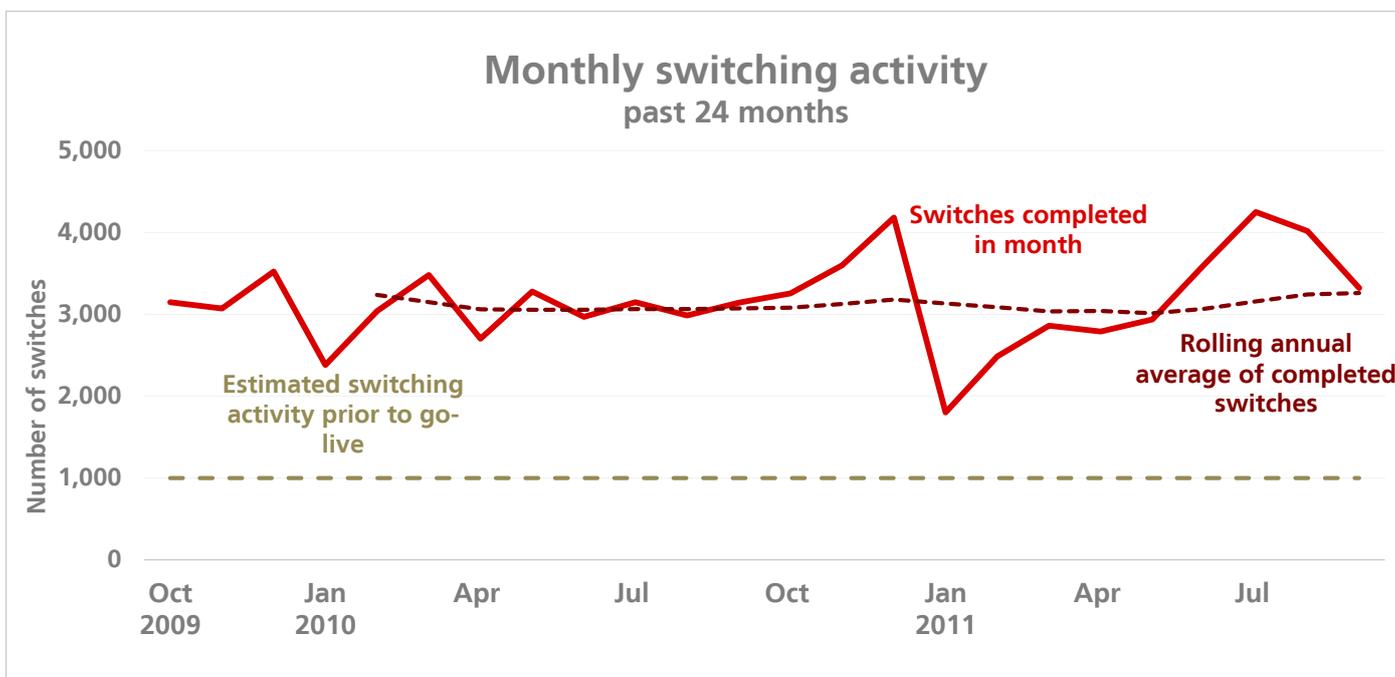
The outcome is the significantly reduced volumes of gas needed to balance the Maui pipeline, as can be seen in the chart above. In each of the calendar years 2006, 2007, and 2008, over 4,600,000 GJ of balancing gas were bought and sold by MDL. In 2009, balancing gas volumes totalled less than

1,500,000; and in 2010, balancing gas volumes were just over 600,000GJ – a decrease of 87% from 2008 volumes. In calendar 2011, balancing volumes have totalled just over 330,000 GJ in the nine months ending September, compared with over 535,000 GJ during the same months in 2010.

3 Switching performance measures

Monthly switching activity

Switching activity was boosted the past several months by the Electricity Authority’s switching campaign, while switches for the month of September are in line with long term trends. The annual rate of switching for the year ending September is about 15.5%. In comparison, the annual churn rate for electricity is about 20% as at the end of September. Prior to the gas registry going live in March 2009, approximately 1,000 switches were processed on a monthly basis, and the annual churn rate was approximately 4.8%.

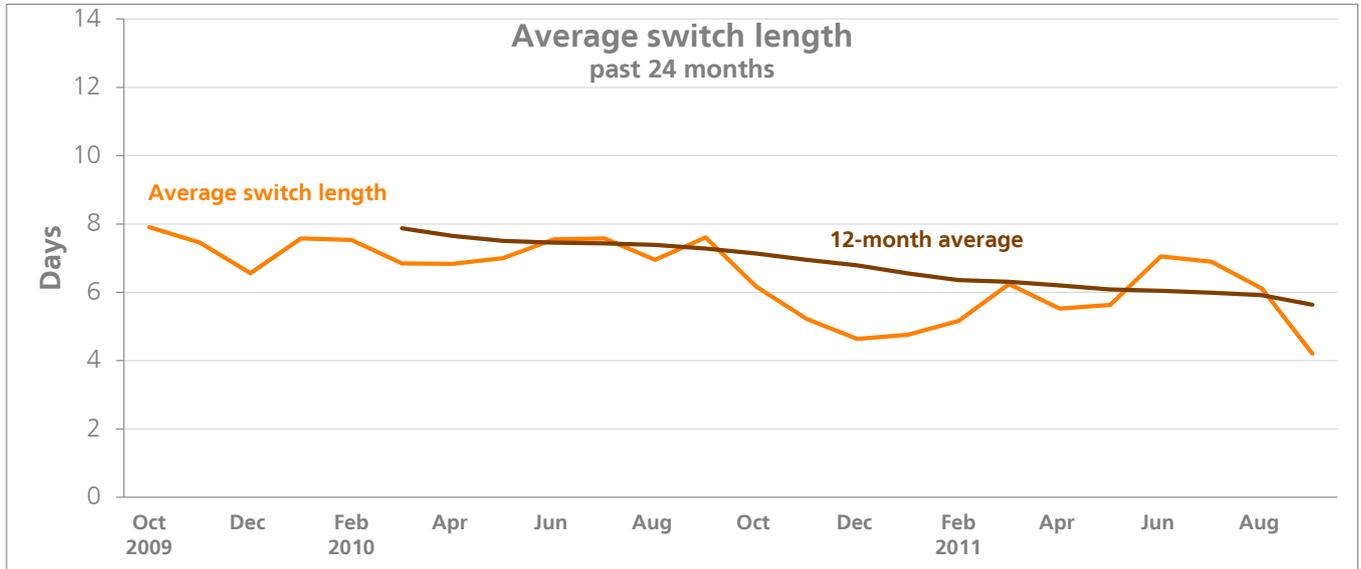


June 2011 in the chart above has been adjusted to remove the 2,243 transfers from the Auckland Gas retailer code to Nova Energy that were processed in that month, as both retailers are part of the Todd group and the transfers were related to a re-branding rather than being “switches”. Likewise, the chart also excludes the transfer of about 6,350 E-Gas customers to Nova Energy in November 2010 as a result of Nova purchasing the customer base from BDO, E-Gas’s liquidator.

Additionally, the chart includes only switches that occurred on open-access distribution networks; switches from open-access to bypass networks (or vice versa) would not be recorded as a switch in the Gas Registry.

Time to process switches

The chart below shows the average length of time it has taken to process the switch requests that have been received in a month. The average time to process a switch dipped again in September to 4.2 days, and the annual average is now slightly over 5.5 days. In comparison, switches could take weeks or even months to process prior to the inception of the switching registry.

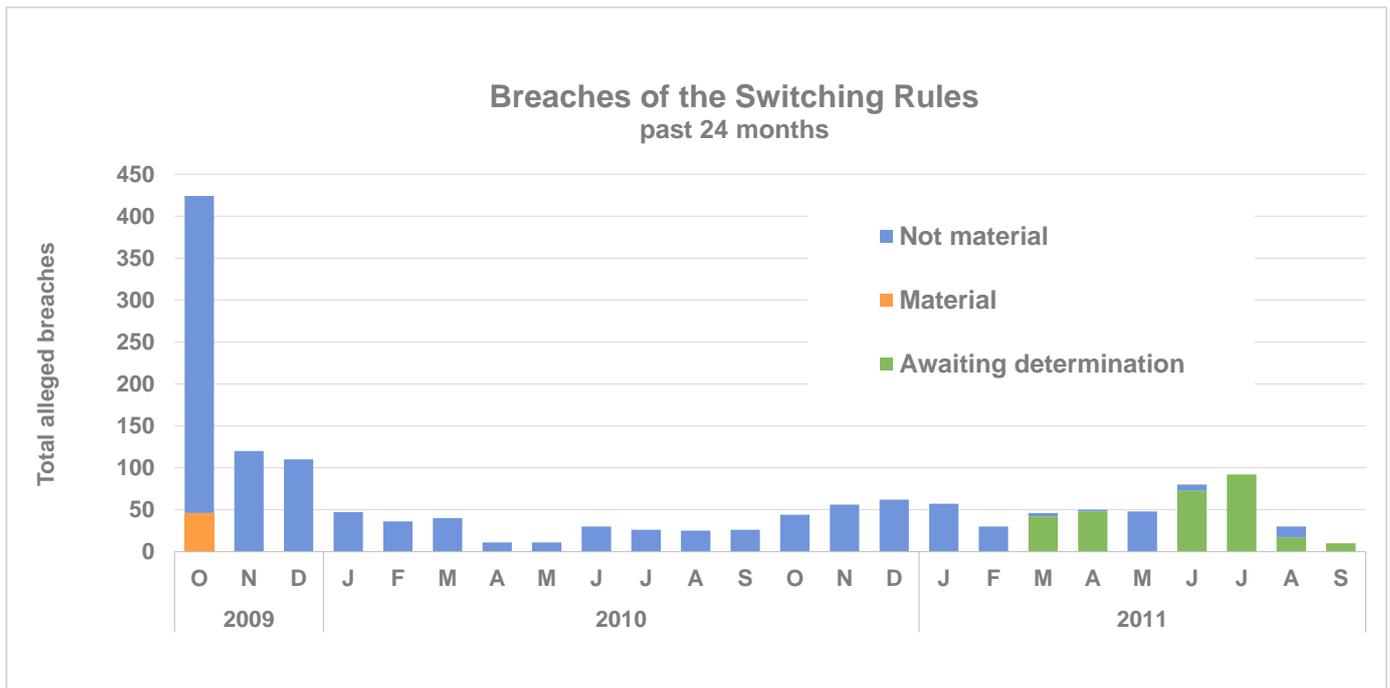


Note that the chart above excludes the transfers from E-Gas to Nova and from Auckland Gas to Nova, all of which went through in less than a day.

Number and severity of breaches to the Switching Rules

The number of switching breaches has fallen significantly since the inception of the Switching Rules, as has the severity of the breaches. The Market Administrator has not determined a breach of the Switching Rules to be material since October 2009.

Many of the breaches awaiting determination relate to a single retailer who has now upgraded its systems to comply with the amendments to the Switching Rules that went into effect in February.



4 Allocation and reconciliation performance measures

Volumes of Unaccounted-for Gas

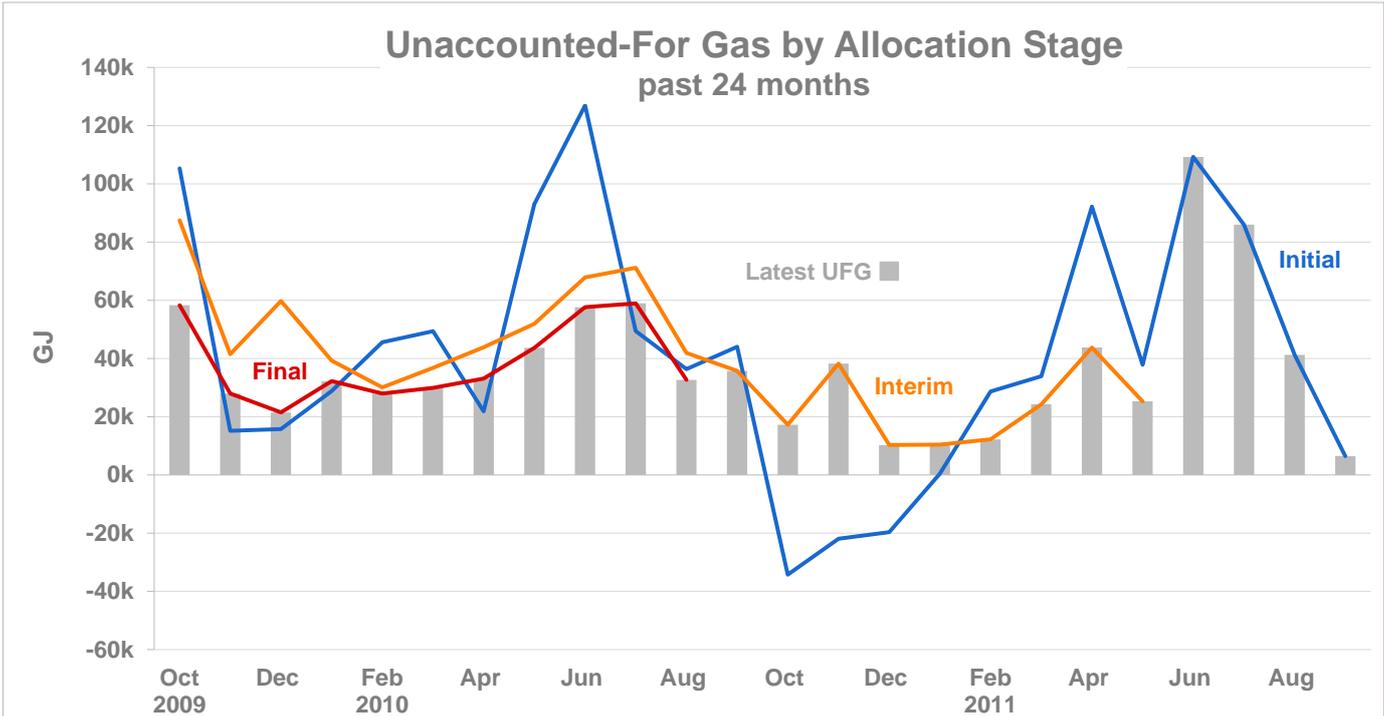
Under the Reconciliation Rules, the amounts of gas that retailers estimate their customers have used are subtracted from the amounts of gas leaving the transmission system. The difference is UFG, which arises from technical losses on the system, metering inaccuracies, and retailer estimation errors. UFG imposes a cost on the market: it is gas that retailers are allocated and must pay for, but cannot sell. Tracking UFG is a way of monitoring these costs and the efficiency of the retail market.

The chart below compares total UFG quantities by consumption month and allocation stage (initial, interim or final). The grey bars show UFG based on the most recent data available.

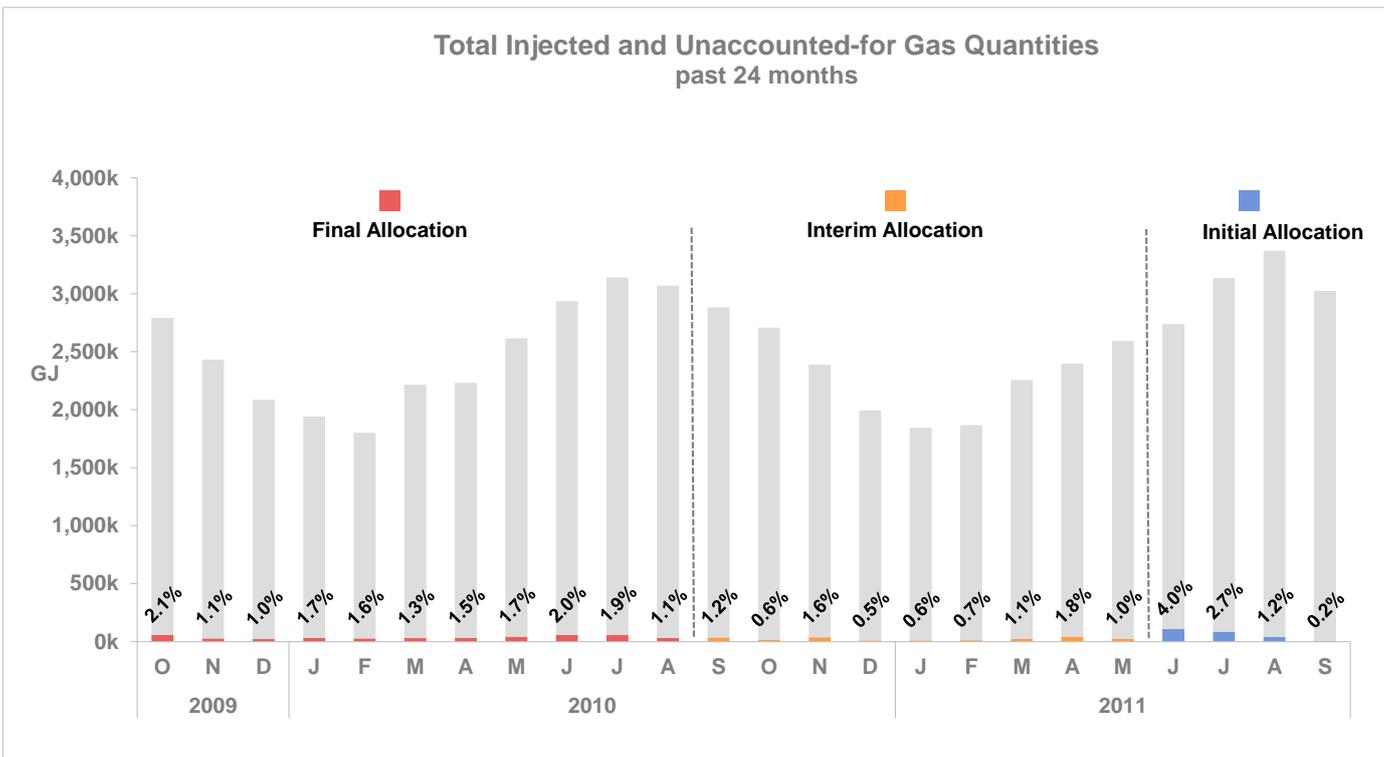
UFG showed a peak over the winter months of 2011, consistent with previous winters. UFG recorded in the months of April, May, June, and July 2011 was 325,000 GJ, which is comparable to the 291,000 GJ recorded at the initial stage for the same months in 2010. In comparison, 875,000 GJ of UFG were allocated at the initial allocation stage during the same months of 2009.

Also consistent with previous winter patterns, UFG has fallen at the interim allocation stage for April and May 2011. Similar drops in UFG are expected for the other winter months of 2011, when retailers submit consumption data based on more complete meter reading data.

Conversely, the UFG for September seems unseasonably low and is caused by negative UFG at a number of gas gates. It is likely that actual UFG for that month will increase once more accurate consumption volumes are used in the interim and final allocation stages.

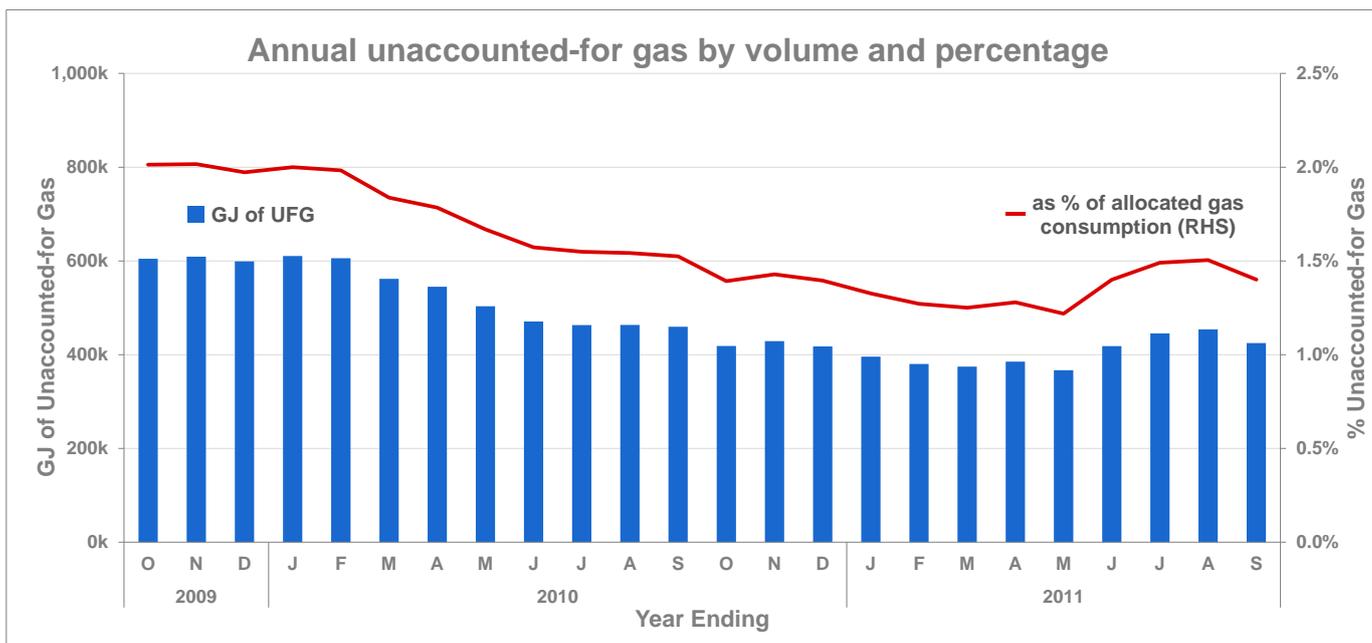


The chart below shows the amount of unaccounted-for gas in comparison to the total amount of allocated gas consumed each month. The grey bars show gas consumption at allocated gas gates, which follows a seasonal pattern: higher in winter and lower in summer. UFG as a percentage of volume follows a similar seasonal pattern.



Another way to think about UFG is the amount recorded over a 12-month period. The chart below shows rolling 12-month UFG figures, both as a GJ total and as a percentage of gas consumed. The information is based on the best data available at the time of publication, so, for example, the September 2011 total is based on 4 initial allocation results and 8 interim results, while the September 2010 total is based on one interim and eleven final allocation runs.

The chart shows that annual UFG has declined from over 2% of annual consumption at allocated gas gates to less than 1.5% as of earlier this year. The annual average UFG as of September 2011 is 1.4%.

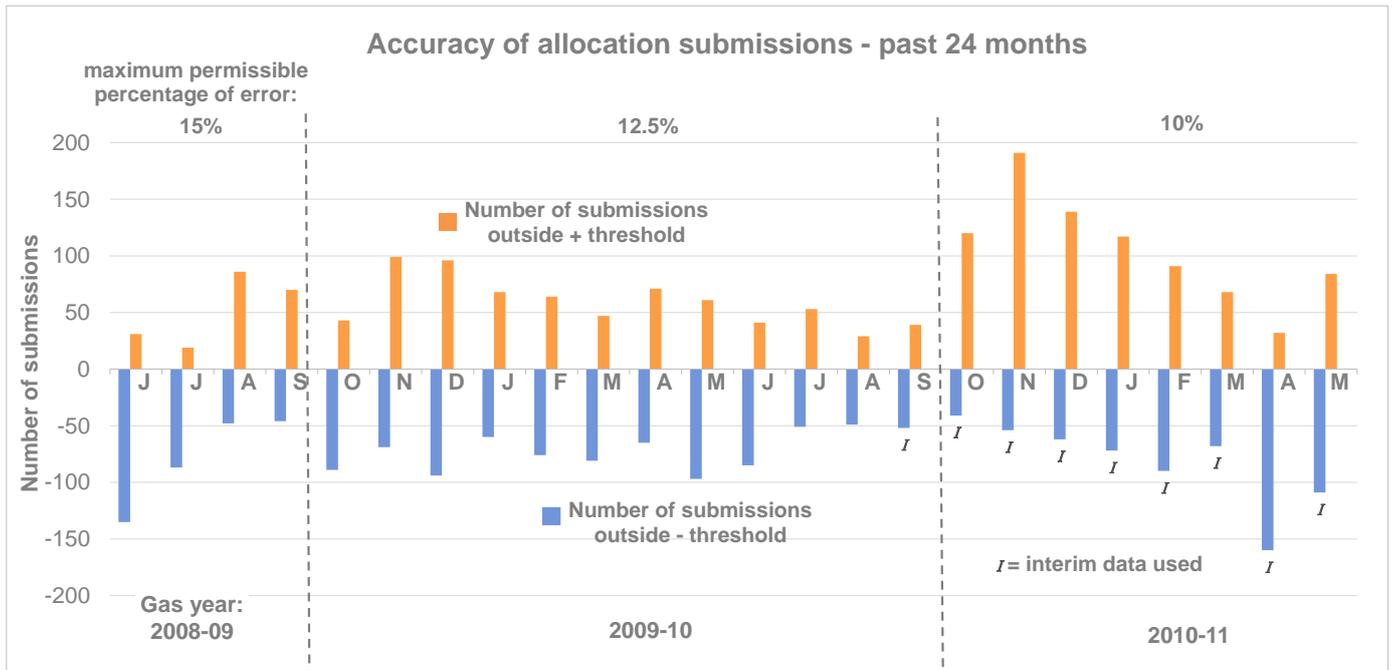


Accuracy of submission data

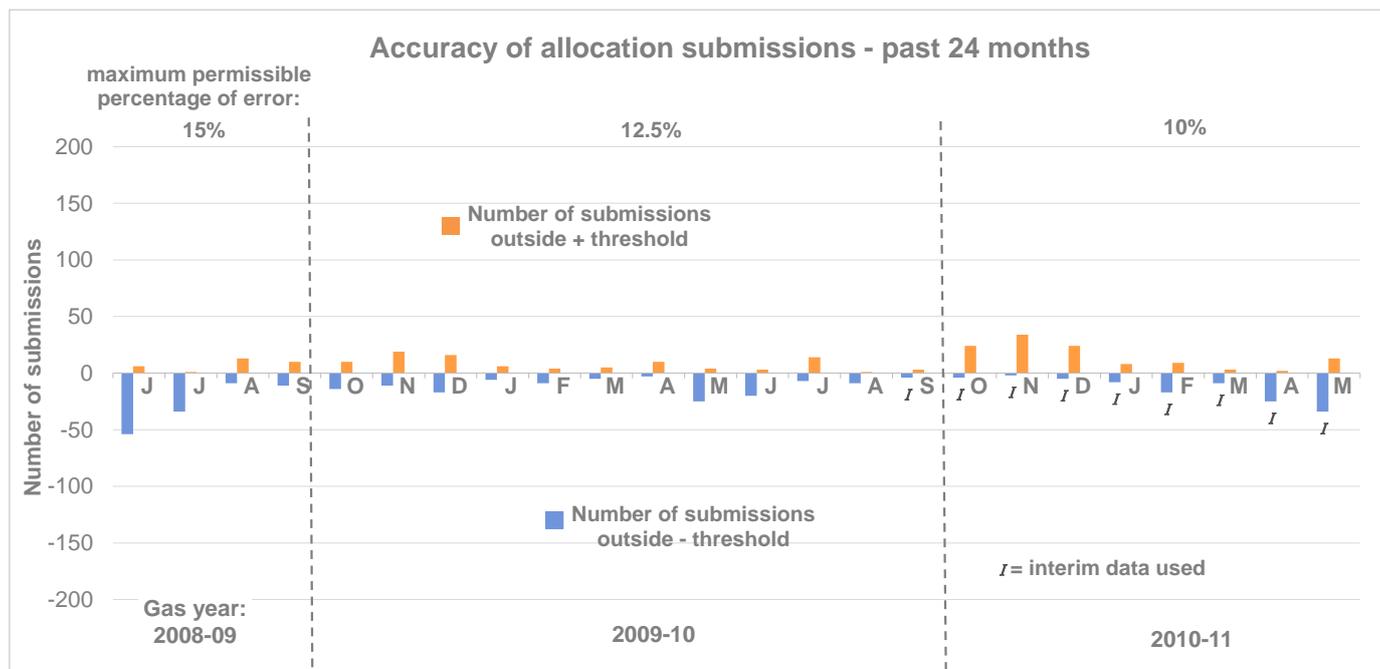
The accuracy of initial submissions is important, as balancing and peaking charges on the Vector transmission system are levied on the basis of initial allocation results and are not subsequently washed up. This means that the balancing costs of the UFG created through inaccurate initial consumption submissions fall onto all retailers at the affected gate. To limit the impact of this effect, the Reconciliation Rules require that initial consumption submissions are within a specified percentage of the final (and most accurate) consumption submissions.

The chart below shows the number of retailer submissions that were outside the maximum permissible error threshold in the last 24 months for which data are available. For this analysis, final submissions were compared to initial allocation submissions for the months they were available (June 09 – August 10). Other months use interim submissions (in place of final) for the comparison data and are marked with 'I' in the chart below. The percentage of error relevant to the consumption month has been used to measure accuracy: 15% in the 2008-09 gas year, 12.5% in 2009-10, and 10% in 2010-11.

There has been an increase in the number of submissions outside the accuracy threshold since October, when a lower percentage accuracy threshold came into effect. It appears that the issue is common to all the large mass market retailers. Interestingly, although this effect is due partially to the tightened accuracy threshold that went into effect in October, the lower threshold is only part of the answer, as a large number of potential breaches would also have occurred if the threshold had remained at 12.5% or even 15%.



The market administrator uses a volume threshold of 200 GJ as a means of differentiating those breaches that are likely to have had a materially adverse effect on other market participants. The chart below shows the number of accuracy breaches that involve gas quantities larger than 200 GJ. As a comparison of the two charts illustrates, there is a significant proportion of accuracy breaches that have involved less than 200 GJ. Deeming these breaches not material allows industry participants to focus on addressing the harm caused by larger volume estimation errors.

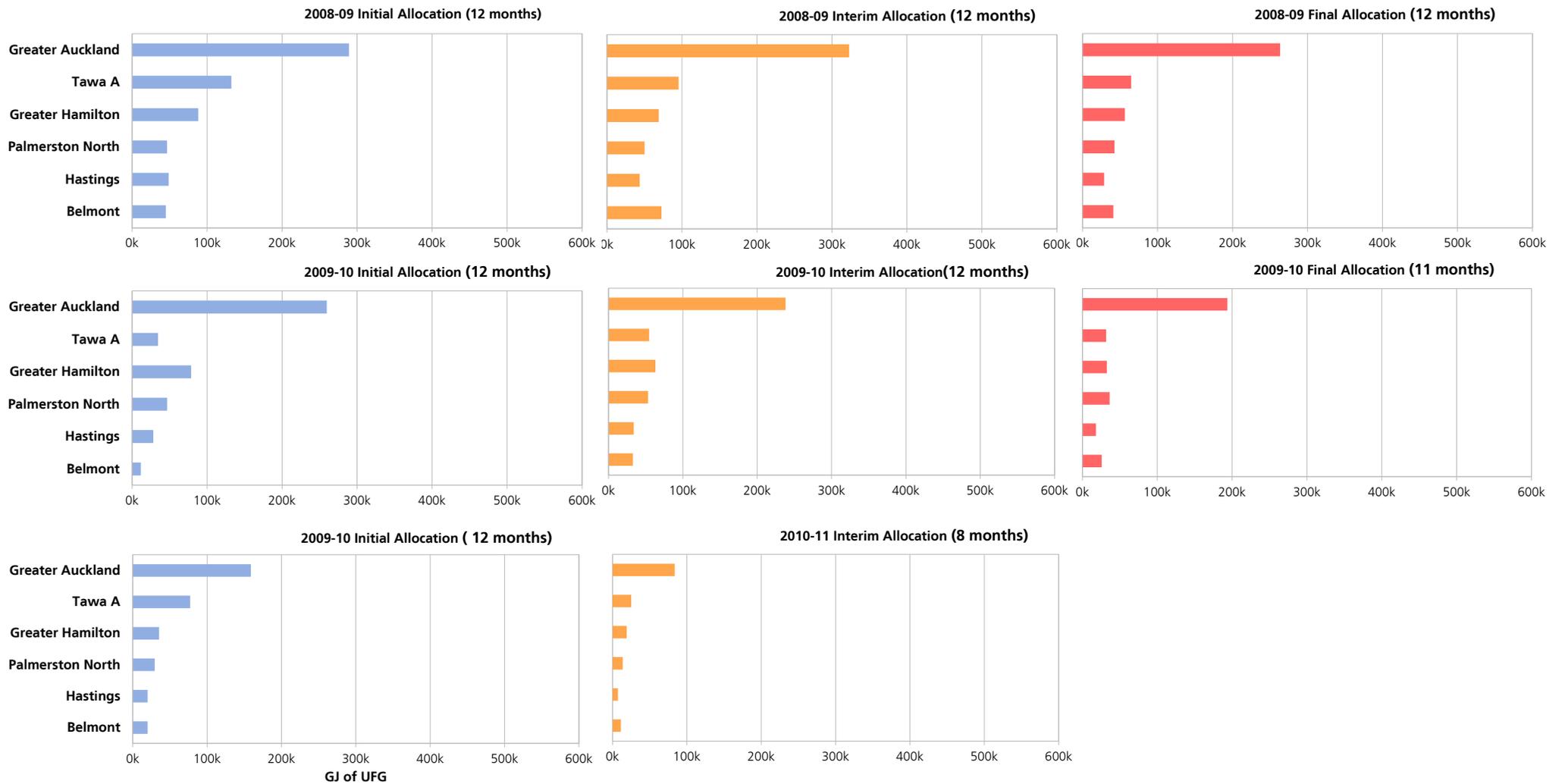


Gas gates where UFG is the highest

Greater Auckland gas gate is consistently the largest contributor of all the gas gates to UFG volumes, followed by Tawa A, Greater Hamilton, Palmerston North, Hastings, and Belmont. This pattern is roughly consistent over all three allocation cycles and across gas years, indicating that UFG is a persistent issue at these gates.

All allocations have now been performed for the 2008-09 gas year and are shown in the top row below. For the 2009-10 year, shown in the middle row, initial and interim allocations have been done for all 12 months; as well as the final allocations for October through August 2010. Comparing the 2008-09 initial and interim allocations with those for 2009-10 shows a trend of decreasing UFG.

For the 2010-11 gas year, the charts below include initial allocation information through September 2011 and interim information through May 2011. No final allocations have yet been performed for the 2010-11 gas year.



Audits commissioned

Event audits

There have been no event audits commissioned in the past quarter.

Performance audits of retailers

The baseline performance audits of Nova Energy, Energy Online, and Greymouth Gas under the Reconciliation Rules were completed this quarter and are available on the Gas Industry Co website.

The performance audits have highlighted some of the same factors found in the event audits; particularly the use of inaccurate factors in converting meter readings into energy. Some of these inaccuracies appear to arise from poor data management by distributors, meter owners, and retailers in the gas registry. Gas Industry Co is considering ways to improve the quality of registry data in order to address these data weaknesses. Gas Industry Co has also consulted a guideline note on energy conversion factors. Once finalised, this guideline note will serve as a consistent point of reference for all retailers in achieving best practice in their energy conversion calculations.

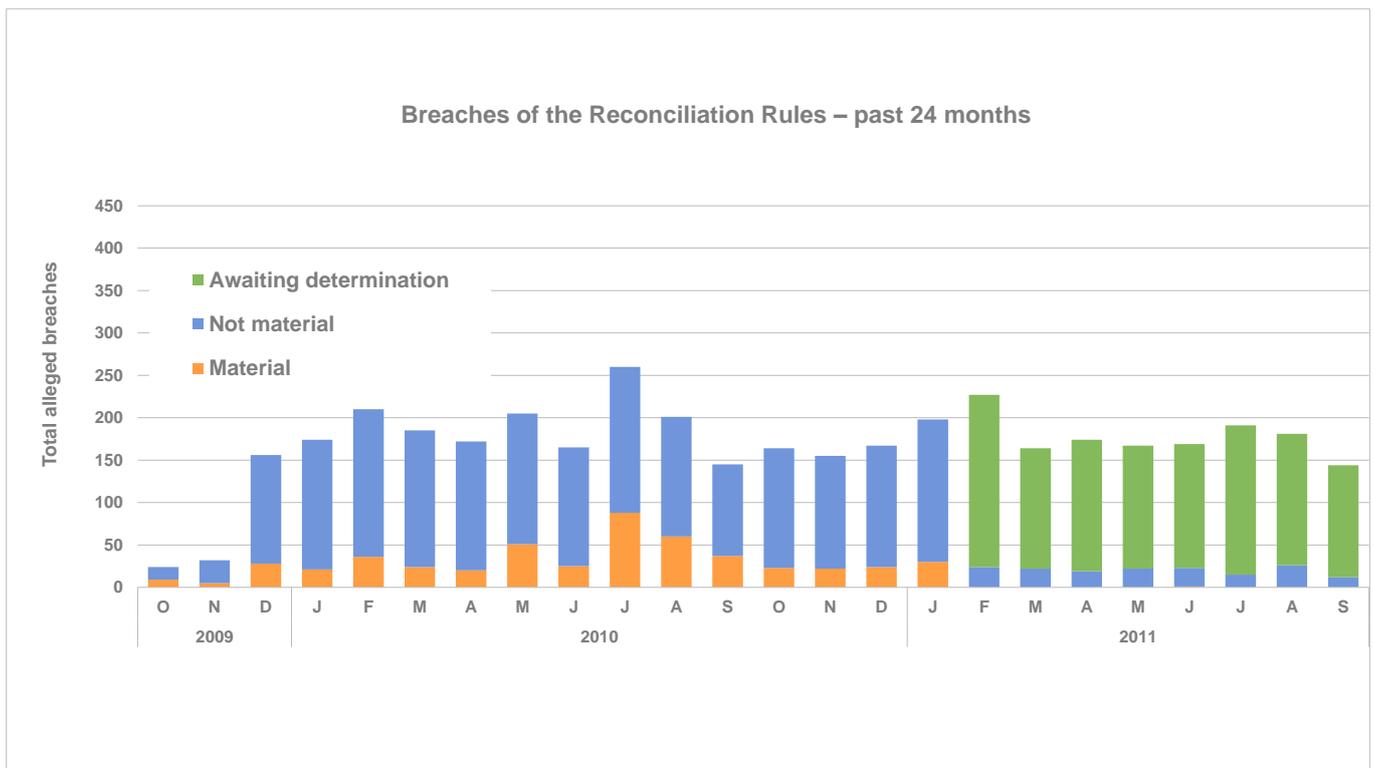
A performance audit of the allocation agent is in progress.

Gas Industry Co is in the process of liaising with meter owners regarding the obligation to audit meter owners.

Number and severity of breaches of the Reconciliation Rules

The marked increase in alleged breaches from December 2009 onwards represents breaches of rule 37. This is the rule that requires the accuracy of consumption information provided at the initial allocation stage to be within a specified tolerance level of the information provided at the final allocation stage.

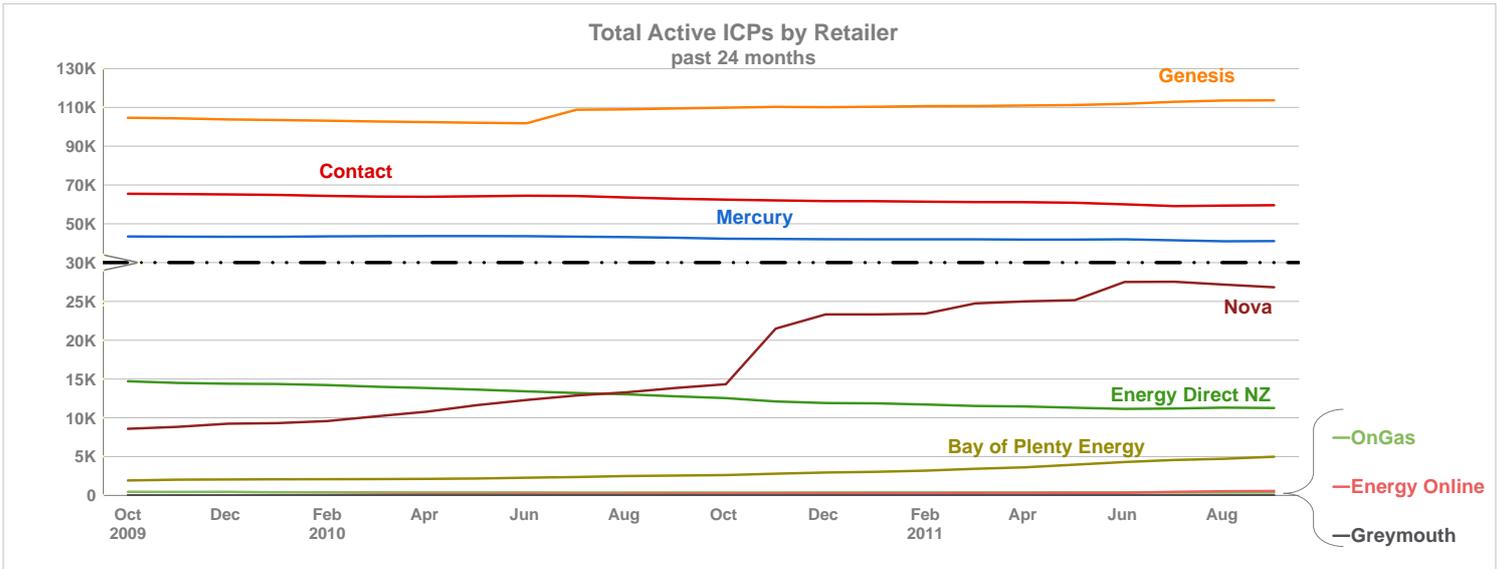
In the past quarter, the Market Investigator has effected a settlement of numerous breaches of rule 37 spanning the consumption months of October 2008 to November 2009. The Market Administrator is reflecting on the Investigator's settlement of previous rule 37 breaches to see if it alters the Market Administrator's view on materiality of rule 37 breaches going forward.



5 Market competition performance measures

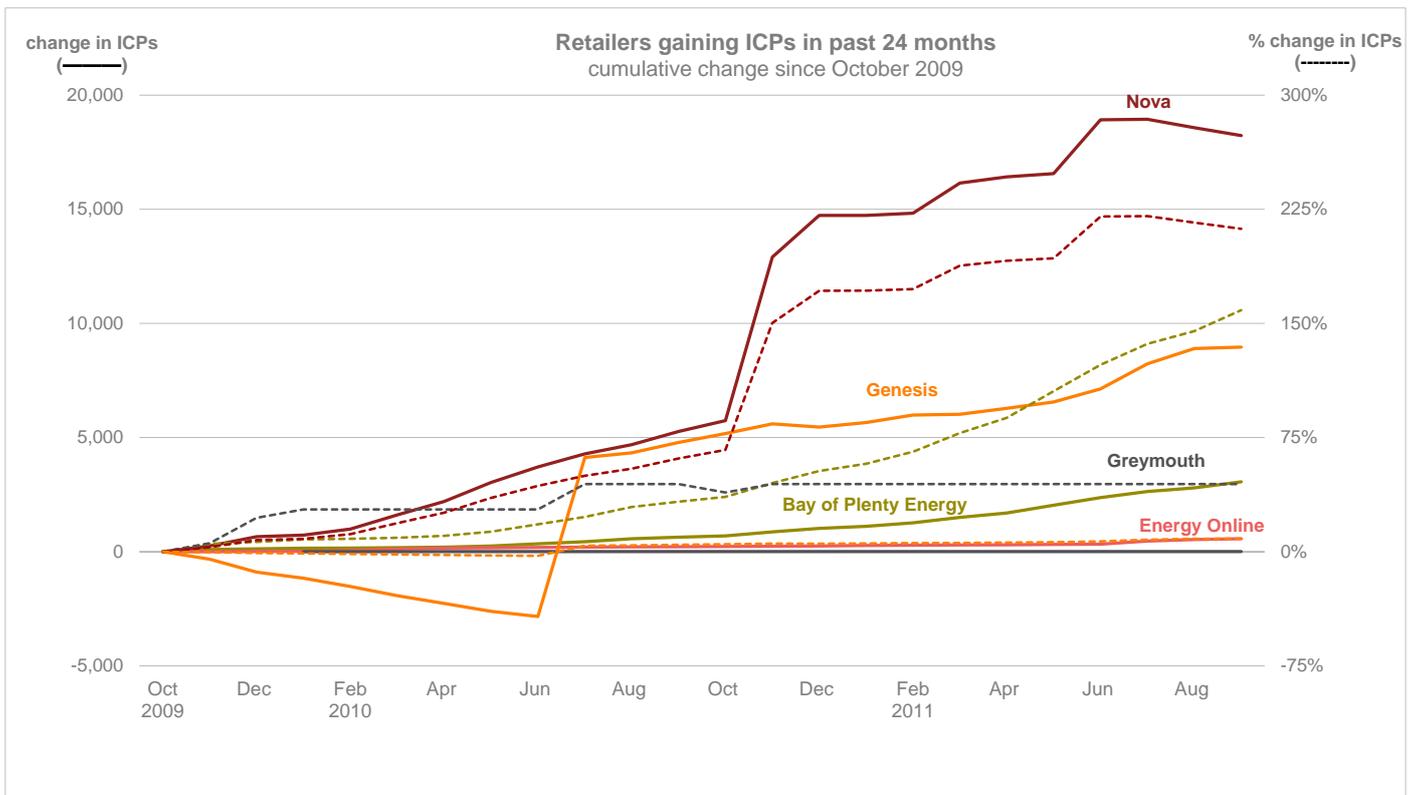
Market share of ICPs by retailer

Market share of ICPs has been relatively constant over the past quarter, as illustrated by the chart below. Nova Energy has increased by step changes as a result of acquiring the E-Gas customer base in November 2010 and amalgamating its Auckland Gas brand in December 2010 and June 2011. The other movements in market share are due to customer switching.

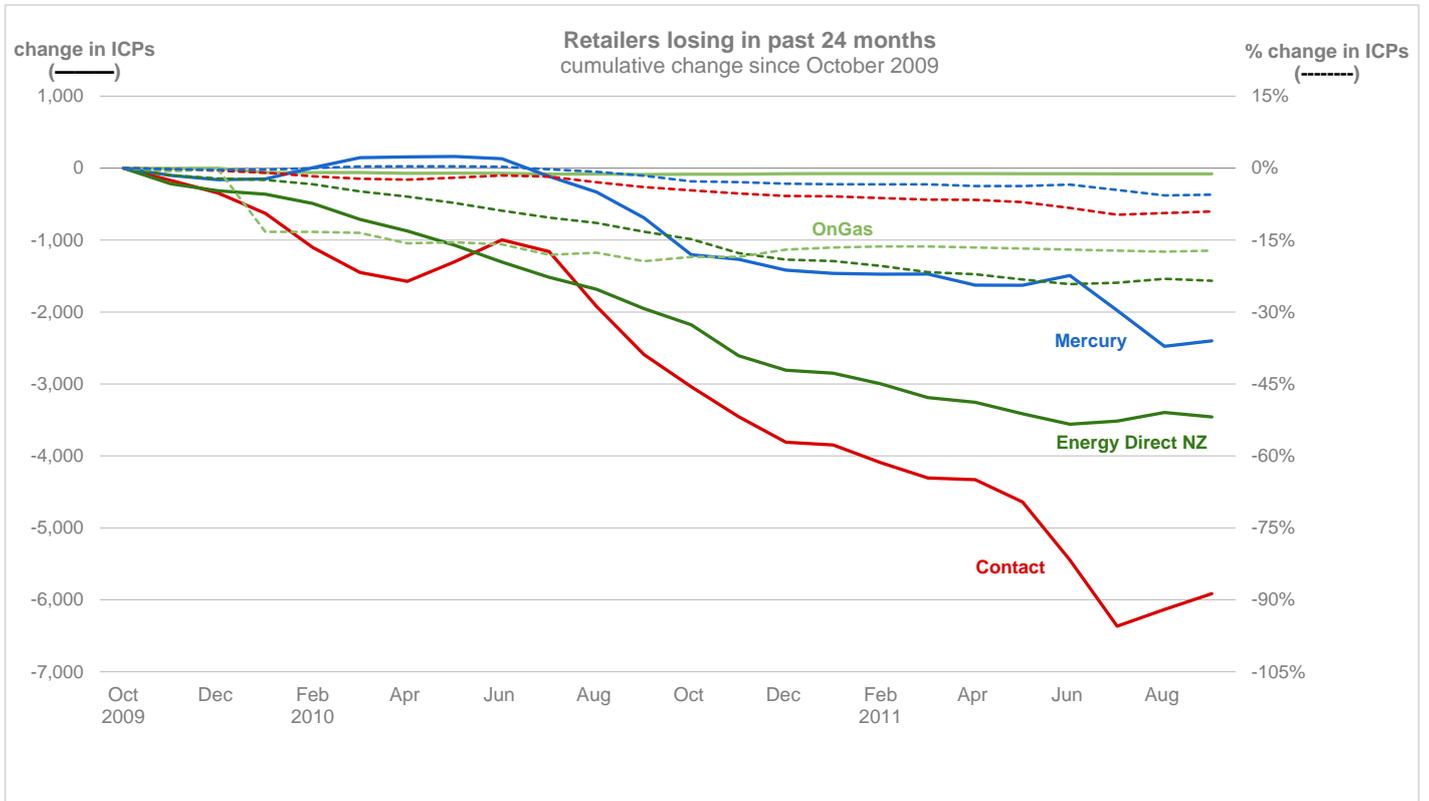


The two charts below are drawn from the same data set. The solid lines represent the change in numbers of ICPs, and the dashed lines show the percentage change in ICPs relative to October 2009. The first chart includes retailers who have experienced net gains in ICPs in the past two years, and the second includes retailers who overall have lost ICPs in the same timeframe.

In percentage terms, Bay of Plenty Energy has grown over 150% in the past 2 years. Energy Online, a retail brand of Genesis Energy, has grown from zero customers in October 2009 to over 570 customers today. Genesis itself has also grown in customer numbers. Its apparent decline in active customers was found to be a misclassification of ICPs, which was corrected in July 2010; overall, Genesis has gained nearly 2,600 ICPs since registry go-live.



The chart below shows the retailers who have lost market share in ICP numbers in the past two years. As discussed above, Auckland Gas's customers have been transferred to the Nova Gas retailer code and are no longer shown on this chart.



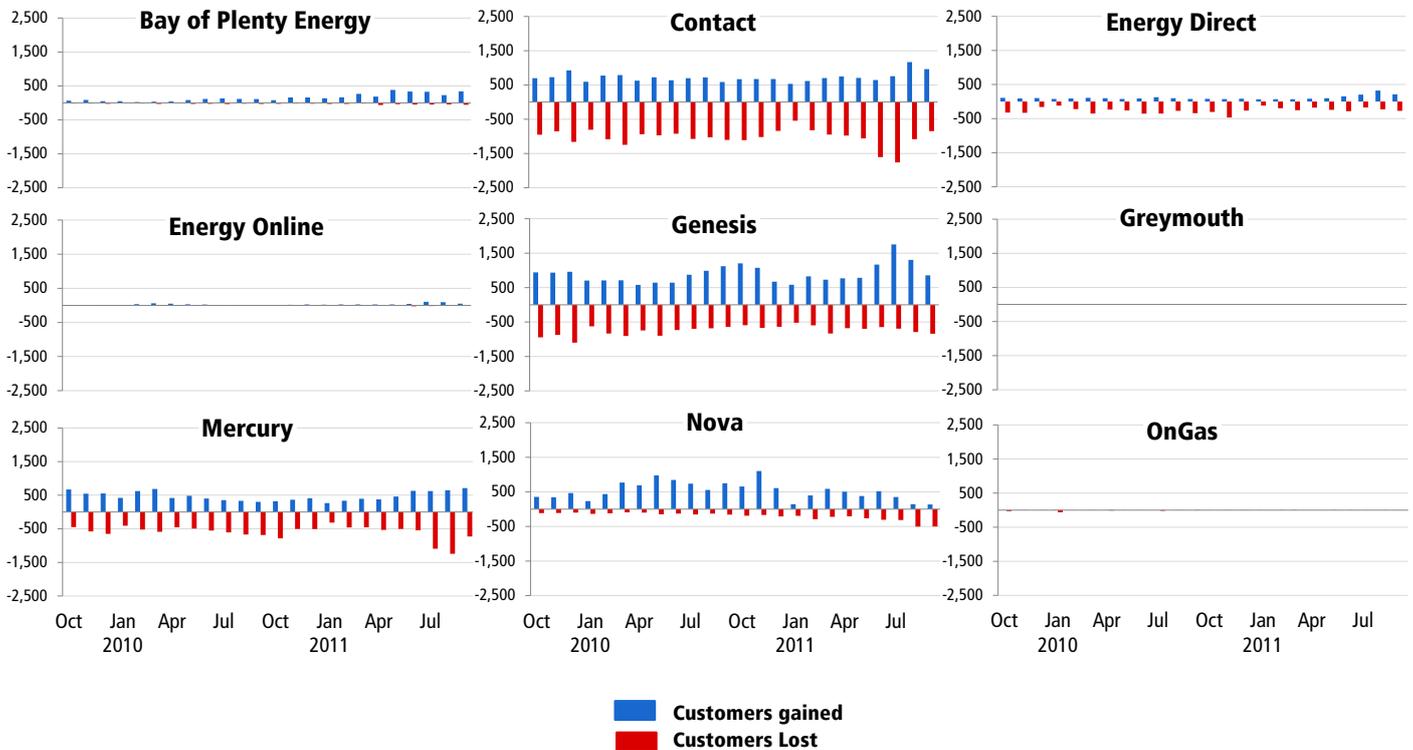
Note that all three of the ICP share charts above include data from ICPs on open-access distribution networks only; information about ICPs on bypass networks is not available in the Gas Registry.

Switching activity by retailer

This chart shows the numbers of ICPs gained and lost by retailers over the past two years. The blue bars show the number of customers gained by the retailer each month, and the red bars show the number of customers lost.

As shown by these charts, although the net changes in number of customer ICPs may not change significantly from month to month for some retailers, there is a lot of underlying switching activity, particularly for the mass market retailers Contact, Genesis, and Mercury. Note that these charts exclude the bulk transfer of 6,348 ICPs from E-Gas to Nova in November 2010; they also exclude the transfer from Auckland Gas to Nova of 1,478 ICPs in December 2010 and 2,243 ICPs in June 2011.

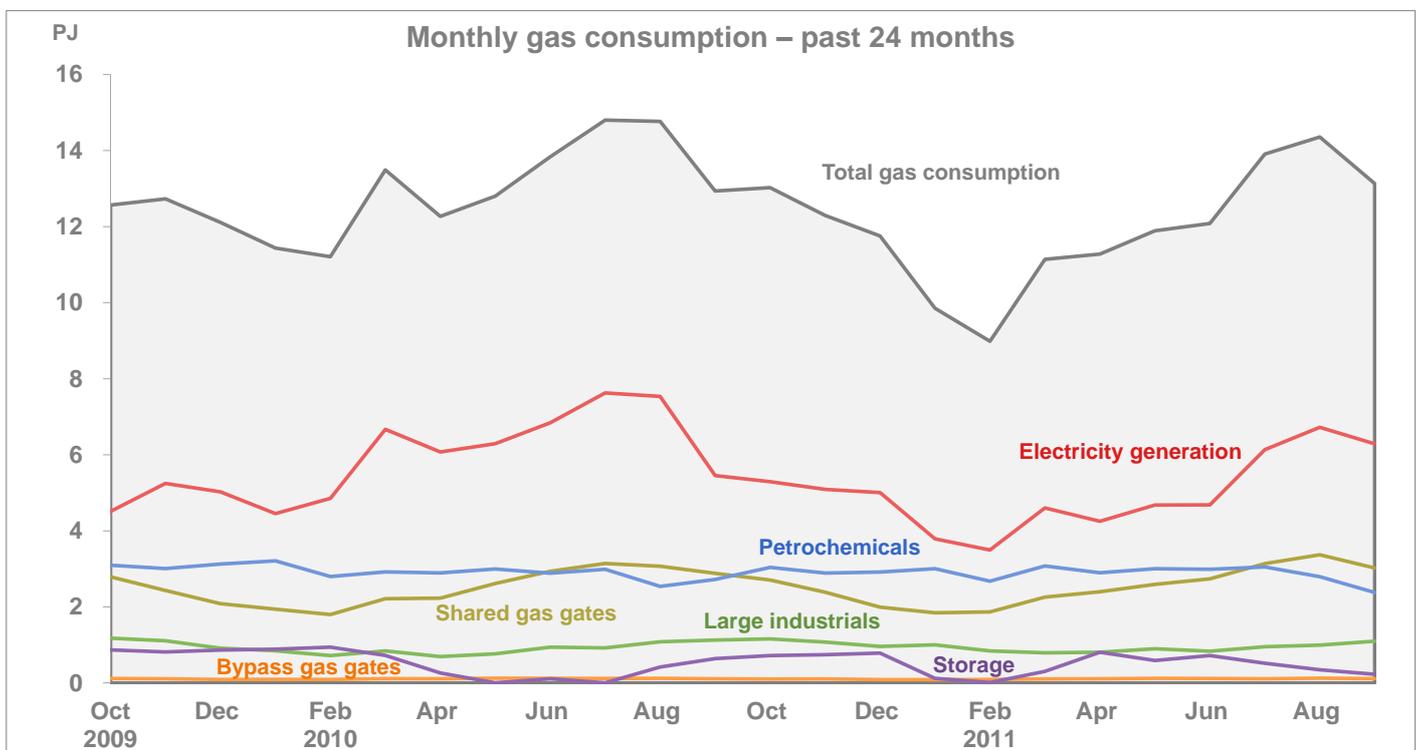
Switching activity by retailer



Total gas volumes

The chart below shows the total amount of gas consumed over the past two years by all gas users. The top grey line shows total consumption; the coloured lines provide a breakdown by type of use.

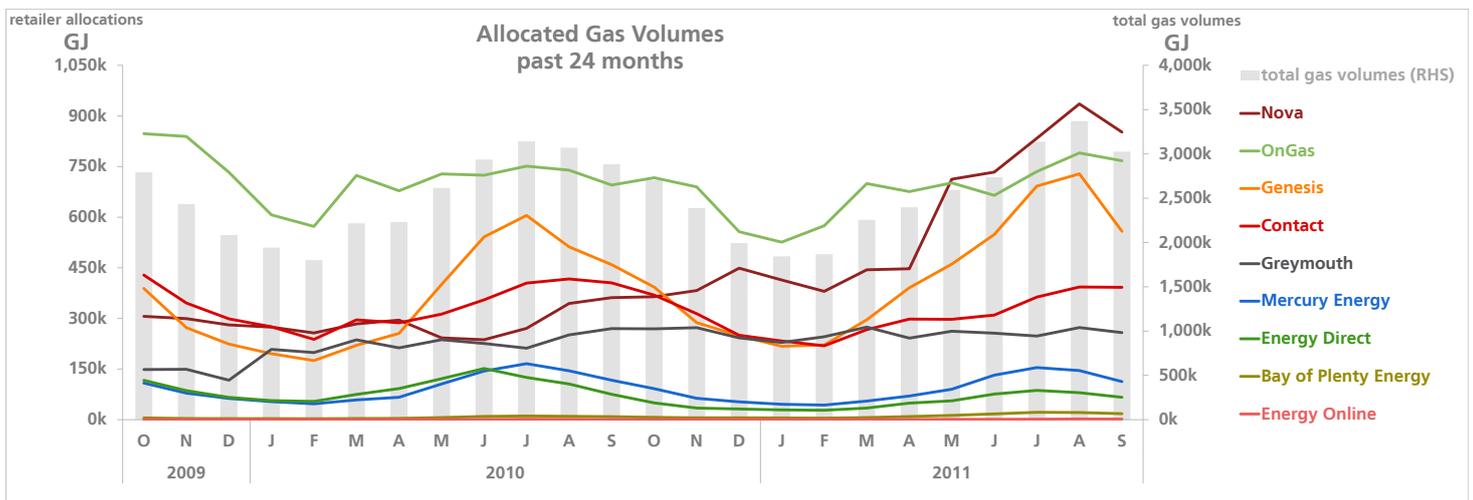
- The red line shows the seasonal peaks and troughs in gas used for thermal electricity generation.
- Consumption for petrochemicals, in blue, is relatively constant, as is usage by large industrials (in green).
- The purple storage line also shows a seasonal trend: gas is used for storage during the summer and shoulder seasons, although there were also volumes of gas going to storage this past winter.
- The orange line represents gas used by consumers connected to the private pipelines owned by Nova.
- The tan line shows the amount of gas used by customers connected to shared gas gates. This represents the majority of commercial and residential customers. There is a seasonality trend to the consumption, higher in winter and lower in summer. These allocated gas volumes are broken down by retailer in the next section.



Allocated gas volumes

This chart shows the gas volumes allocated to retailers at shared gas gates over the past two years. This is gas consumed by industrial, commercial, and residential customers, but it excludes gas volumes from direct connect gas gates; that is, from gas gates that supply a single customer directly from the transmission system. For this reason, gas volumes supplied through direct connect gas gates to such industrial sites as thermal power stations, oil refinery, and paper and chemical factories are not included in the chart below.

In May this year, Nova Energy overtook OnGas in terms of the largest share of allocated gas. This increase reflects the increase in Nova's customer base, through acquisition of E-Gas, amalgamation of Auckland Gas, and organic growth. OnGas is the next largest retailer in terms of gas volumes, with its large proportion of high-consuming commercial and industrial customers. Genesis also showed an increase in gas volumes over the winter and a decrease in volume in September, consistent with its winter peaking pattern in previous years.

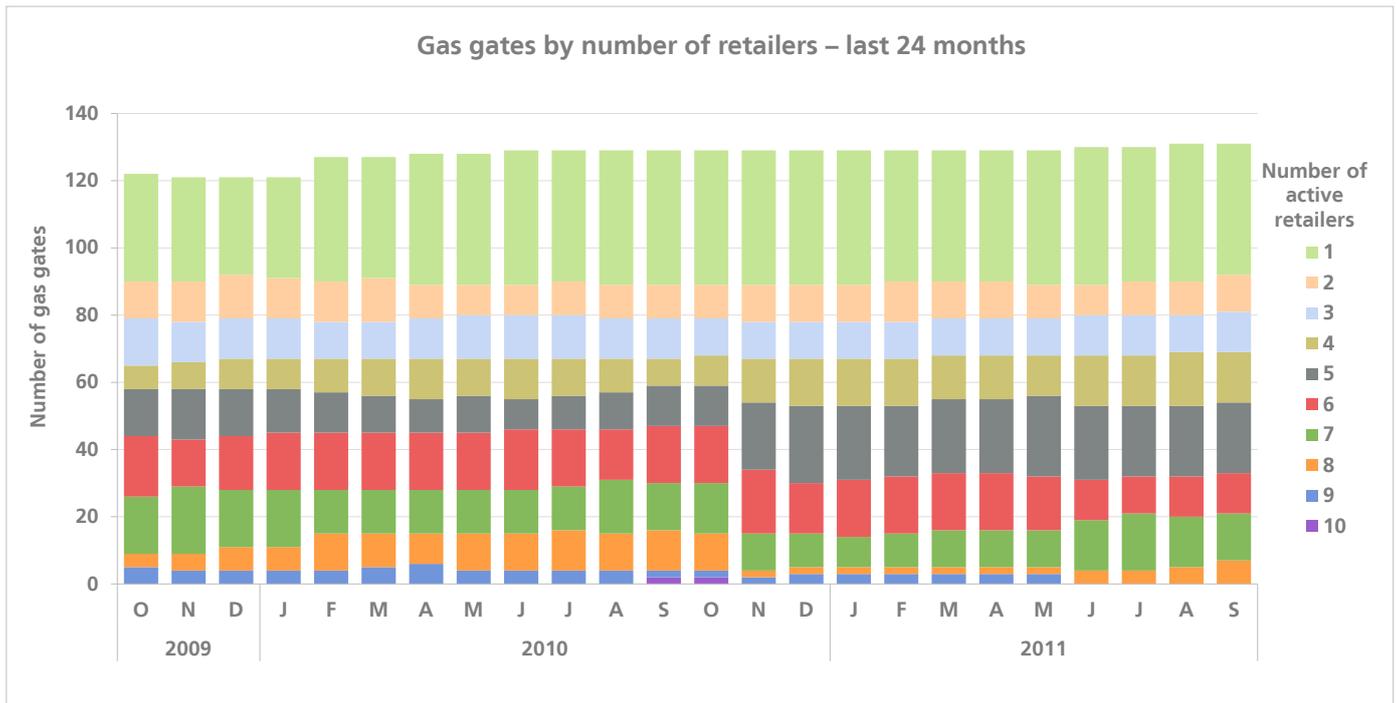


The data are from a mix of allocation stages: Final through August 2010; Interim for September 2010 through May 2011; and Initial for June through September 2011.

Gas gates by number of retailers

This chart shows, by month, numbers of gas gates by the number of active retailers. The greater the number of retailers that trade at a gas gate, the greater the potential competition for customers.

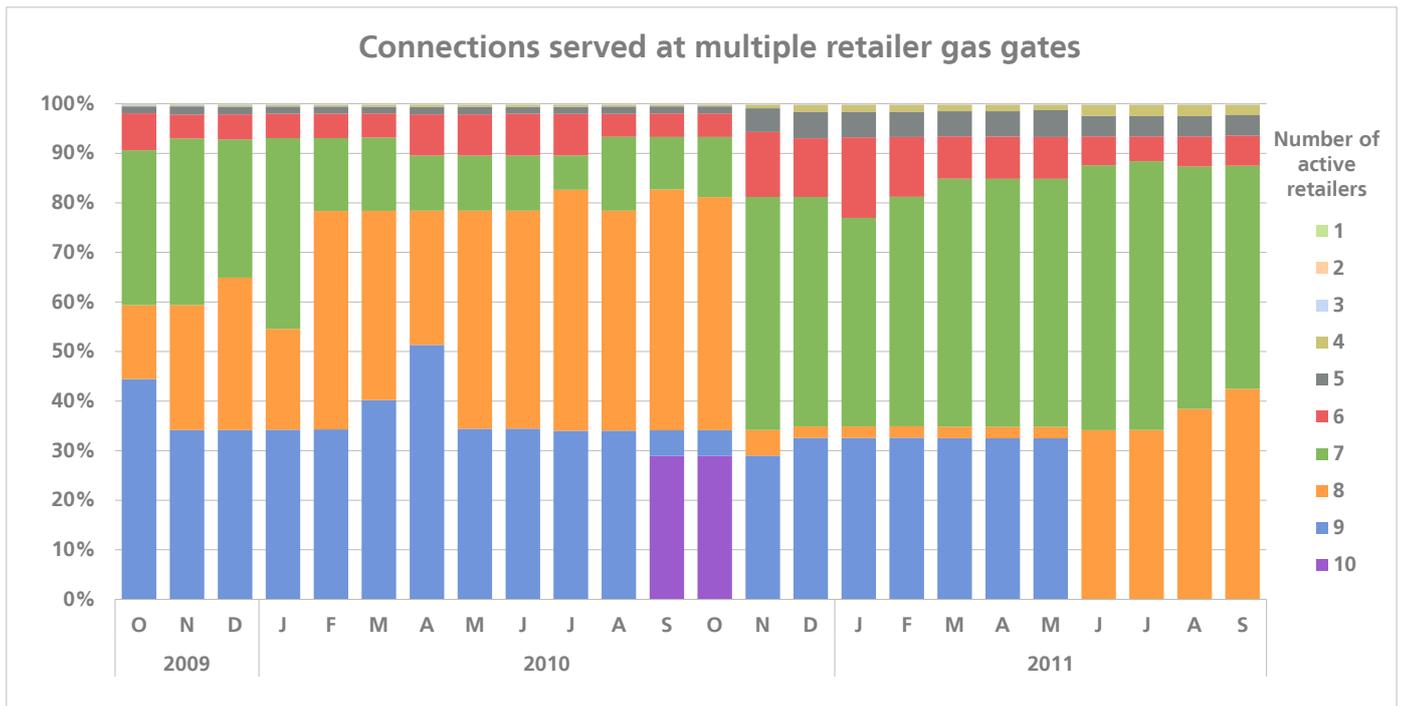
There have been two step-changes in the data over the past year: the acquisition by Nova Gas of the E-Gas customer base in November last year, and the amalgamation of Auckland Gas into the Nova Gas brand in June of this year. In spite of these decreases in the number of retail brands, the number of gas gates at which three or more retailers trade has remained about the same in the past two years. As of September 2011, there are 81 such gas gates.



Connections served by multiple retailers

This chart plots the proportion of gas customers who are served from the gas gates in the chart above; that is, customers served at gas gates where multiple retailers trade. As with the previous chart, the acquisition of E-Gas and the amalgamation of Auckland Gas have produced step changes in the data.

The chart shows that the majority of gas customers – over 93% -- could potentially be served by at least six retailers. This provides some indication of the amount of competition in the retail market.



Note that the above chart includes data from ICPs on open-access distribution networks only; information about ICPs on bypass networks is not available in the Gas Registry.

6 Critical Contingency Management performance measures

There have been no critical contingency events since the last Quarterly Report.