

QUARTERLY REPORT

Quarter ended 30 September 2018

Welcome to the September 2018 edition of Gas Industry Co's Quarterly Report.

Gas Industry Co is required to report to the Minister of Energy and Resources each quarter on the progress made towards meeting objectives and outcomes set for the gas industry by the Government. Further to this requirement, we highlight key developments in our work programme areas, as well as the gas sector for the three months ended 30 September 2018.

The gas industry has seen rapid changes in the sector reflecting the changing role of gas in New Zealand. This is evidenced with activity in the quarter indicating some important implications for the future of the sector. They include the Government's clear message, in halting the granting of future offshore petroleum exploration permits and the proposed Zero Carbon Bill.

Industry participants are proactively looking to engage in the challenge both through investment decisions, as well as looking at how gas infrastructure can contribute to New Zealand's economy. Recent instances have included a decision in July by Todd Generation to proceed with a new electricity generation peaker plant in Taranaki, and research commissioned by First Gas and Powerco into future uses for gas networks in a decarbonised energy system – for instance to convey hydrogen or biofuels.

Gas Industry Co's work will evolve to reflect emerging climate change policies as well as by ensuring that good information is available for the industry to make good fact based decisions. Deeper understanding into how the industry is responding to these challenges will also come with the publication of the Gas Industry Co commissioned report *Long Term Gas Supply and Demand Scenarios* due for release later in the year.

The Minister of Energy and Resources wrote to Gas Industry Co in July expressing a concern as to whether information affecting the efficient and effective operation of the downstream gas market is being communicated to market participants in a timely or full manner. The Minister's concern echoes similar concerns raised by several market participants. Gas Industry Co has instigated a new workstream to consider how to improve information disclosure in the gas industry.

A Gas Industry Co report *Retail competition in the LPG market* was published in July. The purpose of the paper was to review the retail market arrangements for liquefied petroleum gas (LPG) from a policy perspective. Gas Industry Co committed to this review in response to stakeholder concerns about possible barriers to competition in the LPG retail market. The paper includes an overview of what LPG is and how it is used; canvasses the relevant characteristics of the retail LPG market, including market shares and price competition with other fuels; and assesses whether there are barriers to LPG competition. Although there are costs involved in entering the retail LPG market and operational economies of scale, the paper does not find any costs or impediments that are not faced by all LPG retailers. Indeed, there are some arrangements in the LPG sector that would appear to mitigate the costs of retailing LPG. In sum, the paper does not identify any barriers to competition in the retail LPG market that require regulatory intervention.

In this Quarterly Report we highlight further progress being made in the gas transmission work programme. First Gas is continuing to work hard with industry stakeholders on the design for a single

gas transmission access code (GTAC) to replace the existing Maui Pipeline Operating Code and the Vector Transmission Code.

Since submitting the GTAC to Gas Industry Co last December, First Gas held a series of workshops and consultations on aspects of its proposed changes to the GTAC. The workshops have been a useful forum for stakeholders to discuss the design of the GTAC.

On 11 September, First Gas released its revised, draft GTAC for formal consultation and convened a further workshop for stakeholders. On 31 October, First Gas submitted its next iteration of the GTAC to Gas Industry Co for assessment. Gas Industry Co's preliminary work on the next iteration will involve it asking stakeholders for feedback on its assessment approach and address any matters that require particular attention.

Gas Industry Co continues to support the GTAC work, and we recognise the constructive engagement and significant investment that First Gas, industry participants, and stakeholders have put into the development of a new code to date. The latest information on GTAC can be found on our website: <https://www.gasindustry.co.nz/work-programmes/transmission-pipeline-access/developing/>.

In late September, First Gas announced to its customers and stakeholders, that a defect was detected in the Maui (400) pipeline at Tongaporutu, Taranaki during a scheduled routine check.

The pipeline in that area has been subject to lateral force from a land slip which had created a crease and further slippage would likely exacerbate the damage, which could result in loss of containment. Such an outcome would not be dissimilar to the [Maui pipeline outage in October 2011](#) when the pipeline was out of service for almost a week.

Since detecting the defect, First Gas has commenced construction of a bypass. At the same time, First Gas has also put in place a team to address an emergency response in the event that a loss of containment occurs before repairs are able to be completed. Repairs are scheduled to be completed by early December.

The First Gas communications strategy has been exemplary and stakeholders have been pleased with their approach and the current level of engagement is helping to address uncertainty.

The quarter also saw a tightening of gas supply due to a number of factors. In September, production from Pohokura's unmanned offshore platform was stopped when a faulty valve was discovered, decreasing gas supply by about 100 TJ per day. At the time, Shell, the operator of the Pohokura field, estimated that repairs would not be complete before late November. Repair work includes the use of a specialised sea vessel to replace the valve as well as a section of offshore pipeline that was damaged earlier in the year. Completion time is dependent on weather and sub sea visibility.

Planned maintenance at the Kupe production station has decreased its output by about 20 TJ per day since the end of October. This outage is also expected to extend to late November.

The tight gas supply is reflected in prices on the gas spot market. Average gas prices for January through August of this year were in the \$6 to \$7 per GJ range, while the average price for October was over \$19 per GJ. The situation is having an effect on the electricity market as lower than average water levels in the hydro lakes combined with plant maintenance and increased reliance on thermal generation has contributed to high prices on the electricity spot market. Whilst most retailers have contractual hedges or generation plants, some larger customers are exposed to spot prices and some retailers pass the higher prices through to their retail consumers. The retail impact and pass through of higher prices is resulting in greater scrutiny of the operation of the New Zealand energy markets.

On the demand side, Methanex has chosen this time to complete a scheduled turnaround of its Waitara Valley plant, and the Motunui plant is running at reduced rates. Genesis Energy's combined cycle gas generator (known as e3p) is offline for planned maintenance. Gas Industry Co has also been

advised that some industrial customers have been forced to reduce their gas usage due to the upstream supply issues.

The [Quarterly Industry Performance Measures](#) published in the quarter, provides an update on the performance measures that Gas Industry Co monitors on a regular basis. The purpose of those measures is to track the performance of the Gas (Switching Arrangements) Rules 2008, the Gas (Downstream Reconciliation) Rules 2008, and the Gas Governance (Critical Contingency Management) Regulations 2008. The report includes measures directly related to these governance arrangements as well as measures for the competitive outcomes that they foster.

The report also tracks transmission pipeline balancing, distribution, and metering measures, as a means of informing Gas Industry Co and the wider industry on these issues. The full report is available on our website - highlights of which include:

- In the past 12 months, there have been about 3,600 not withdrawn switches completed per month, which translates to an annual churn rate of about 15.4%.
- In 2018, nearly three quarters of customer switches have been completed within three business days.
- Over 99% of gas customers are connected to a gate where seven or more retailers trade, suggesting that the gas retail sector is generally competitive throughout the North Island.
- Average annual unaccounted-for gas (UFG) over the past year stands at about 1.0% (compared with about 2% in 2009).

Preparations to develop our Statement of Intent for the next two financial years have begun. This process includes establishing a work programme and associated costs for FY2020, with indicative activity for at least the subsequent two years. The work programme costs are principally funded through market fees under gas governance rules and through annual [Levy Regulations](#).

Our unique co-regulatory model relies on industry input in developing the Statement of Intent and we have found early engagement with stakeholders on strategic and work priorities to be invaluable.

The next step is our annual Co-regulatory Forum on 30 November from which we will publish detailed proposals in a formal consultation paper with opportunity for stakeholder input.

We are happy to report that good progress continues to be made in achieving the objectives and outcomes for Gas Industry Co and the industry in Part 4A of the Gas Act, and the GPS, through the Work Programme included in the Company's Statement of Intent. An updated summary of our work is included on page four.

Nga mihi nui.

Andrew Knight
Chief Executive

Workstream developments during the quarter are summarised in this Quarterly Report. Further details of the developments have generally been reported previously through Gas Industry Co's periodic News Bulletins and are available on our website www.gasindustry.co.nz.

PROGRESS TOWARDS OBJECTIVES AND OUTCOMES

1 JULY – 30 SEPTEMBER 2018

This section provides an update of progress towards objectives and outcomes for Gas Industry Co the gas industry body, as set out in the Gas Act 1992 and the April 2008 Government Policy Statement on Gas Governance, particularly as implemented through the Company's FY2019-2021 Statement of Intent.

Strategic Objective 1: Promote efficient, competitive and confident gas markets			
Project	Rationale	Activity	Status
Retail Gas Contracts Oversight Scheme	<ul style="list-style-type: none"> Enhanced consumer outcomes by providing clarity around the respective roles and obligations of consumers and industry participants involved in the supply of gas to small consumers. 	<ul style="list-style-type: none"> Administer the Retail Gas Contracts Oversight Scheme. Conduct a full review of retail contracts every 3 years. Review retailers' contracts otherwise on an exceptions basis (ie new entrants and changed contracts). Provide additional information to assist new entrant retailers to understand their obligations and governance processes. 	<ul style="list-style-type: none"> Since the Retail Scheme's introduction in 2010, retailers' overall rating has increased from 'Moderate' to 'Substantial' alignment with the benchmarks. The 2018 full review will be finalised in the upcoming quarter, with results expected to be published in November.
Gas Distribution Contracts Oversight Scheme	<ul style="list-style-type: none"> Gas industry participants and new entrants are able to access distribution pipelines on reasonable terms and conditions. Ensure consistency in distribution services arrangements. 	<ul style="list-style-type: none"> Monitor and report to the Minister on the status of distribution arrangements. Develop and publish distribution contract principles. Encourage publication of network services agreements. 	<ul style="list-style-type: none"> The second assessment issued in May 2014 showed that overall alignment improved from 'Moderate' to 'Substantial'. Gas Industry Co plans to survey distributors in FY2019 to confirm progress with retailers moving to new contracts consistent with the Scheme principles.

Strategic Objective 1: Promote efficient, competitive and confident gas markets

Project	Rationale	Activity	Status
Wholesale Market Monitoring	<ul style="list-style-type: none"> emsTradepoint wholesale gas market (eTp) makes a significant contribution to GPS outcome for 'efficient arrangements for the short-term trading of gas'. 	<ul style="list-style-type: none"> Gas Industry Co continues to monitor activity and developments in the wholesale spot market. 	<ul style="list-style-type: none"> Following the Minister's request that Gas Industry Co investigate issues relating to information disclosure, the wholesale market monitoring processes may require review. Gas Industry Co is continuing to support the Energy Trader Forum.
Information Disclosure	<ul style="list-style-type: none"> In August 2018 the Minister of Energy and Resources requested that Gas Industry Co consider whether the existing arrangements for industry participants to disclose information that could have an impact on the downstream gas market were adequate. Gas Industry Co responded that a number of stakeholders shared the Minister's concern and that we would instigate a workstream to identify and address the issues. 	<ul style="list-style-type: none"> Gas Industry Co has consulted with industry participants and related parties on whether they consider information disclosure in the sector is sufficient. Conducted interviews with upstream stakeholders. Barriers to disclosure primarily relate to JV arrangements that may be challenging to address in a non-regulatory manner. 	<ul style="list-style-type: none"> Following the Minister's request, Gas Industry Co has established a new workstream that will progress improvements in information disclosure in the gas sector. Gas Industry Co is working on an "options" paper for consultation in Q1 2019.

Strategic Objective 1: Promote efficient, competitive and confident gas markets

Project	Rationale	Activity	Status
Gas Quality	<ul style="list-style-type: none"> Maintain an acceptable standard of gas quality. Ensure costs of gas quality incidents are met efficiently. Achieve improved transparency on gas quality incidents. 	<ul style="list-style-type: none"> Ongoing review of industry arrangements for managing gas quality. Consider options for improving gas quality arrangements. 	<ul style="list-style-type: none"> Gas Quality: Requirements and Procedures Document was issued in 2015. The Gas Quality Update released in June 2017 recommended allowing for a new GTAC to take shape before reconsidering matters relating to gas quality.
Rule Changes	<ul style="list-style-type: none"> Improved industry governance through regular review of existing arrangements and recommending changes where appropriate. 	<ul style="list-style-type: none"> Maintain rule change registers. Review Switching, Reconciliation, and CCM rules/regulations once the new GTAC design is sufficiently advanced. 	<ul style="list-style-type: none"> A pilot of day-after (D+1) gas allocation and daily balancing and peaking pool (BPP) information delivery is continuing successfully. The pilot will be reviewed in light of the development of the new GTAC, and changes may be made to the Reconciliation Rules when appropriate.
Gas Measurement	<ul style="list-style-type: none"> Workstream arose from industry stakeholder discussions at annual Co-Regulatory Forums undertaken in context of GPS outcome of providing efficient market for metering services. 	<ul style="list-style-type: none"> Develop a minimum voluntary standard for advanced metering. 	<ul style="list-style-type: none"> As part of its next steps, Gas Industry Co established a technical advisory group to develop a minimum voluntary standard for advanced metering.

Strategic Objective 2: Facilitate efficient use of, and investment in, gas infrastructure

Project	Rationale	Activity	Status
Transmission Access	<ul style="list-style-type: none"> Ensure transmission pipeline access arrangements transparently provide for the efficient utilisation of physical capacity and effectively signal any need for efficient investment in additional capacity. 	<ul style="list-style-type: none"> Address, using regulatory and/or non-regulatory options, any lessening of competition due to transmission constraints. Improve the quality and availability of pipeline security and supply/demand information. Promote changes to transmission access arrangements. 	<ul style="list-style-type: none"> In 2016, the former Vector and Maui transmission systems came under the ownership of First Gas. First Gas is leading a process for developing a new gas transmission access code (GTAC) to replace the VTC and MPOC. Gas Industry Co determined that the GTAC submitted on 8 December 2017 is not materially better than the current MPOC and VTC. First Gas is engaging with stakeholders to develop a revised GTAC. A revised GTAC was submitted to Gas Industry Co on 31 October for assessment.
Gas Supply/Demand Study	<ul style="list-style-type: none"> <i>Long-Term Gas Supply and Demand Scenarios</i> commissioned to provide industry stakeholders with information that may be useful for making business decisions. 	<ul style="list-style-type: none"> Update the supply/demand study biannually. 	<ul style="list-style-type: none"> Third biennial edition of the <i>Long Term Gas Supply and Demand Scenarios</i> was released in October 2016. Gas Industry Co has commissioned Concept Consulting again to produce the next update due for release later in 2018.
Transmission Pipeline Balancing	<ul style="list-style-type: none"> Improved industry arrangements. Gas industry participants and new entrants are able to access transmission pipelines under reasonable terms and conditions. 	<ul style="list-style-type: none"> Assess balancing market developments. 	<ul style="list-style-type: none"> A post-implementation review following the October 2015 introduction of Market-Based Balancing (MBB) identified efficiency improvements.

Strategic Objective 2: Facilitate efficient use of, and investment in, gas infrastructure

Project	Rationale	Activity	Status
			<ul style="list-style-type: none"> First Gas and stakeholders are considering balancing in the context of the new GTAC development.
Transmission Code Change Requests	<ul style="list-style-type: none"> Ensure ongoing relevance and efficiency of multilateral terms of access to transmission pipelines. 	<ul style="list-style-type: none"> Transmission Code Change Requests processed as required. 	<ul style="list-style-type: none"> No changes to the MPOC are expected while First Gas is developing the GTAC in consultation with stakeholders.
Interconnection	<ul style="list-style-type: none"> Improved industry outcomes. Gas industry participants and new entrants are able to access transmission pipelines under reasonable terms and conditions. 	<ul style="list-style-type: none"> Review interconnections as required. Address any concerns regarding reasonable access. Amend Interconnection Guidelines if needed. 	<ul style="list-style-type: none"> Interconnection Guidelines have been in place since 2009. Transmission System Owner policies are largely consistent with those guidelines. First Gas and stakeholders are considering interconnection arrangements as part of developing the GTAC.
Security and Reliability	<ul style="list-style-type: none"> Gas Industry Co's 2015/16 review of transmission pipeline security and reliability found arrangements were generally appropriate but noted several opportunities for improvement under current arrangements (mainly development of first combined First Gas Transmission Asset Management Plan) and several areas where arrangements were evolving (Commerce Commission price-quality regulations). 	<ul style="list-style-type: none"> Gas Industry Co will continue to review developments and work with stakeholders on further improvements. 	<ul style="list-style-type: none"> Gas Industry Co published an assessment of security and reliability issues in March 2017. First Gas has now published its 2018 Asset Management Plan. Gas Industry Co intends to assess the extent to which First Gas has adopted the suggestions outlined in the March 2017 paper, once assessment of the GTAC is complete.

Strategic Objective 3: Deliver effectively on Gas Industry Co's accountabilities as the gas industry body

Project	Rationale	Activity	Status
Downstream Reconciliation	<ul style="list-style-type: none"> Oversight of the Gas (Downstream Reconciliation) Rules 2008. Improved industry arrangements and consumer outcomes through the objective of fairly allocating, and reducing, unaccounted-for-gas (UFG) and its associated costs. 	<ul style="list-style-type: none"> Oversight of the Reconciliation Rules, including Allocation Agent Service Provider role. 	<ul style="list-style-type: none"> Reconciliation Rules operating well, with Energy Market Services (EMS) performing Allocation Agent Service Provider role. Gas reconciliation audits performed regularly. Annual Unaccounted for Gas (UFG) factors and unusual metering arrangements reviewed for any significant differences. A pilot of day-after (D+1) gas allocation and daily balancing and peaking pool (BPP) information delivery is continuing successfully. The pilot will be reviewed following the completion of the GTAC development process, and changes to Reconciliation Rules proposed if appropriate.
Switching and Registry	<ul style="list-style-type: none"> Oversight of the Gas (Switching Arrangements) Rules 2008. Efficient retail market and improved consumer outcomes by facilitating market contestability through customer switching between retailers. 	<ul style="list-style-type: none"> Oversight of Switching Rules, including Registry Operator Service Provider role. 	<ul style="list-style-type: none"> Switching Rules operating well, with Jade performing Registry Operator Service Provider role. Switching statistics report issued monthly, with switching levels remaining stable. Switching audits performed regularly.

Strategic Objective 3: Deliver effectively on Gas Industry Co's accountabilities as the gas industry body

Project	Rationale	Activity	Status
Critical Contingency Management	<ul style="list-style-type: none"> Oversight of the Gas Governance (Critical Contingency Management) Regulations 2008. Improved industry outcomes through increased market confidence in industry's ability to manage critical contingency events. 	<ul style="list-style-type: none"> Oversight of CCM Regulations including management of Critical Contingency Operator (CCO) Service Provider role. Review effectiveness of the Regulations following events and the annual exercises. Operate critical contingency pool following an event. 	<ul style="list-style-type: none"> CCM Regulations operating well, with Core Group performing Critical Contingency Operator Service Provider role. CCO activities are reviewed each quarter.
Compliance	<ul style="list-style-type: none"> Oversight of the Gas Governance (Compliance) Regulations. Improved industry operations through provision of a compliance and dispute resolution process for industry participants. 	<ul style="list-style-type: none"> Oversight of Compliance Regulations. Appointment of Rulings Panel and Investigator, and management of associated processes. 	<ul style="list-style-type: none"> Gas Industry Co continues to fulfil its role as Market Administrator under the Compliance Regulations. Sir John Hansen appointed as Rulings Panel and Jason McHerron as Investigator. Breach activity remains generally low; a positive indicator of industry compliance.
Statutory Accountability	<ul style="list-style-type: none"> To ensure stakeholders understand the scope of the company's intended operations and its results to the cost thereof. 	<ul style="list-style-type: none"> Prepare/publish a Statement of Intent that meets statutory requirements. Prepare/publish Annual Reports that meet statutory requirements. Prepare/publish Quarterly Reports to the Minister on 'state and current performance of the industry' 	<ul style="list-style-type: none"> Annual Report delivered to the Minister on 28 September 2018 for tabling in the House, and gazetted on 12 October 2018. Quarterly Reports and News Bulletins published regularly.

Strategic Objective 3: Deliver effectively on Gas Industry Co's accountabilities as the gas industry body

Project	Rationale	Activity	Status
Performance Measures	<ul style="list-style-type: none"> Improved industry and consumer outcomes through provision of public information on industry performance. Monitor the effectiveness of governance arrangements. 	<ul style="list-style-type: none"> Determine and publish information on each gas governance arrangement that has been implemented. 	<ul style="list-style-type: none"> Performance Measures Reports published quarterly on Gas Industry Co's website, with highlights included in the Quarterly Reports to the Minister.

Strategic Objective 4: Build and communicate the New Zealand Gas Story

Project	Rationale	Activity	Status
NZ Gas Story/State and Performance of Industry	<ul style="list-style-type: none"> Facilitate nexus between industry and Government. Maintain informed industry participants and other stakeholders. 	<ul style="list-style-type: none"> Facilitate, influence and communicate with the industry and Government. Liaise with other regulatory bodies, agencies and associations with responsibilities and interests encompassing the gas industry. 	<ul style="list-style-type: none"> Regular liaison with MBIE, Electricity Authority, and other relevant regulators. In particular, liaising with Commerce Commission on gas transmission matters. 2018 update to NZ Gas Story currently being developed with its annual release planned for December 2018.