# Problem Assessment: Analysis of Submissions and Next Steps

15 May 2020

GAS INDUSTRY COMPANY LIMITED

# Executive Summary

## Introduction

Gas Industry Co released the *Information Disclosure: Problem Assessment* consultation paper ('Problem Assessment paper') in October 2019. This paper reviewed several information elements identified in the *Options for Information Disclosure in the Wholesale Gas Sector* consultation paper ('Options paper') where there may be problems with information transparency and asymmetry. These information elements were assessed against the Government's policy objectives for the gas sector, identified in the Gas Act (1992) ('Gas Act') and the Government Policy Statement on Gas Governance (2008) (GPS).

We received 19 submissions on the Problem Assessment paper from a wide range of parties spanning the New Zealand energy sector. Parties' submissions broadly agreed with the conclusions that Gas Industry Co reached in the paper on many of the information elements. However, there were three areas where parties had a range of perspectives: major gas user facility outages, bilateral contract price and volume information and major users' forecast gas consumption information. Gas Industry Co asked for cross-submissions on these information elements to give parties a further opportunity to comment on these matters. We received 11 cross-submissions on these three matters.

## Issues Identified in Submissions

*Gas production outages*

The Problem Assessment paper identified several issues associated with limited transparency and asymmetry of production outage information. Gas Industry Co considered that gas production outage information should be included in a Statement of Proposal (SOP) for information disclosure in the gas wholesale market.

There are no parties that disagree that gas production outages should be disclosed in some form. Gas Industry Co will include this information element in a SOP. Given the importance of this issue, we will prioritise the development of a SOP for this item along with gas storage outage information. The SOP will include the identification and evaluation of options to address the identified information issues. The industry-led Upstream Gas Outage Information Disclosure Code will be evaluated alongside other possible industry-led and regulatory options.

*Gas storage facility outages*

Information issues related to outages at gas storage facilities are broadly comparable to those of a gas production facility. As such, our problem assessment for this information element was similar to the issues identified for gas production outages. In the Problem Assessment paper, Gas Industry Co considered that gas storage facility outage information should be included in a SOP for information disclosure in the gas wholesale market.

Submitters generally agree with Gas Industry Co's problem assessment for gas storage facility outage information. Gas Industry Co will include this information element in a SOP. Given the

importance of this issue, we will prioritise the development of a SOP for this item along with gas production facility outage information.

*Major gas user facility outages*

There was a mix of supporting and opposing arguments regarding the disclosure of major gas user facility outages in both the Problem Assessment paper and submissions. Gas Industry Co asked for cross submissions on this matter to give parties a further opportunity to provide information. We also released the paper "The Impact of Methanex Plant Outages on the Gas Wholesale Market"[1], prepared by Contract Strategies Ltd, to help inform parties in the cross-submission process.

The broad themes from parties supporting the disclosure of this information element include:

- An information disclosure regime should capture all outages in the sector that affect wholesale gas market volumes and prices.
- Major gas user outage information is valuable for coordinating major user planned outages.
- The Problem assessment should focus on domestic benefits and costs of information disclosure.

Parties opposing the disclosure of the information make the following points:

- To date, Methanex facility outages have not led to significant volumes of additional gas becoming available on the wholesale market and gas prices have not been affected materially.
- The disclosure of Methanex's plant outages would adversely affect its commercial position.
- The disclosure of plant outage information would capture only one of the drivers of major users' production and demand for gas.

There continues to be a range of views on this information element. Gas Industry Co intends to continue its assessment of this issue and will separate the work from the other information elements in our workstream. The next step will be the development of a position paper on this matter.

*Transmission pipeline outages*

Transmission pipeline information is part of the information disclosure regimes in various countries we reviewed in the Options paper. In the Problem Assessment paper, we commented that it appears that there are no major information issues relating to transmission pipeline outages in the New Zealand gas sector. It is expected that the consistency of transmission outage information would improve under GTAC and its associated IT systems. If concerns relating to notifications arise after this change then we would consider them at that time. The paper concluded that there is no reason to include this information element in a SOP. All parties that submitted on this information element agree with this conclusion.

*Contract price & volumes disclosure*

The Options paper proposed that a weighted average price for the 'bilateral contact' (known as gas supply agreements or GSAs) part of the wholesale gas market could be published by an

[1] Contract Strategies Ltd (2020) *"The Impact of Methanex Plant Outages on the Gas Wholesale Market"*, https://www.gasindustry.co.nz/dmsdocument/6901

independent body (such as Gas Industry Co) using price and quantity information related to these individual contracts. Upstream parties would provide contract-specific information to the independent body to enable this calculation.

There are a range of views on this information element in submissions. Recognising the variety of submissions, Gas Industry Co asked for cross submissions to provide parties a further opportunity to comment on this matter.

Overall, five parties consider that there should be disclosure of GSA price and volume information. With the exception of eTp, parties favouring the disclosure of this information element are electricity-only companies or agencies. Eleven parties consider that this information should not be part of an information disclosure regime. These parties span all parts of the gas sector and include electricity companies that participate actively in the gas wholesale market.

Parties supporting the disclosure of this information element make the following broad points:

- The information is important for price discovery in the wholesale gas market**.**
- The information is important for price discovery in the wholesale electricity market.
- Contract price and volume information would be useful for the Electricity Authority to monitor trading behaviour in the electricity sector.
- Commercial sensitivity arguments made by some submitters (see below) are overstated.

Parties opposing the disclosure of this information make the following points:

- GSA price and volume information are commercially sensitive, and aggregation of information does not reduce this sensitivity.
- Some parties submit that no problem in the gas wholesale market has been identified that would justify the disclosure of GSA price and volume information. OMV comments that wholesale gas price discovery already occurs through Requests for Proposals.
- GSA contractual complexities mean that an aggregate price measure would be meaningless and potentially misleading.

Gas Industry Co recognises that electricity companies whose activities do not include gas-fired generation may need an understanding of the gas price that thermal electricity generators face to participate effectively in the wholesale electricity market. We intend to do further work to identify the specific issues and needs of these companies and options for how these needs might be addressed.

*emsTradepoint price & volume disclosure*

The Problem Assessment paper concluded that emsTradepoint market information should not be included in a Statement of Proposal on information disclosure. This conclusion was made on the basis that eTp now discloses lagged Volume Weighted Average Price (VWAP), Frankley Road Natural Gas Monthly Index (FRMI) and Frankley Road Natural Gas Quarterly Index (FRQI) measures on the public facing part of its website. eTp also publishes VWAP and delivered volumes for the previous day on a ticker screen on its page. We understand that eTp is investigating the publication of lagged volume information on the public part of its website. It also offers read-only access to its platform for $5,000 p.a. Most parties who submitted on this information element agree with Gas Industry Co's conclusion. This information element will not be progressed further at this stage. However, Gas Industry Co will continue to monitor the effectiveness of information disclosure on the emsTradepoint market.

*Gas storage facilities information*

Currently there is one storage facility in the New Zealand gas sector, the Ahuroa gas storage facility (Ahuroa, owned and operated by Flex Gas). Flex Gas submits monthly Ahuroa storage level information to MBIE as part of its Quarterly Retail Sales Survey (QRSS). This information is used by MBIE to calculate a quarterly stock change figure in its gas production, transformation and consumption data tables.

Flex Gas has agreed to copy Gas Industry Co in on the information it supplies MBIE. We will publish this monthly Ahuroa storage information on the information portal page of our website.

*Forecasts of gas production*

The Options paper considered the requirement for gas producers to provide forecast production information for the coming year. MBIE already collects production forecast information, under the Crown Minerals (Petroleum) Regulations 2007. MBIE publishes this information in its New Zealand Oil and Gas Reserves tables.

Gas Industry Co does not intend to advance this information element further in this workstream. However, we are aware of parties' interest in having this information available sooner in the year. We will continue to work with MBIE on the timing of the release of this information.

*Forecasts of major users' gas consumption*

The Options paper considered the requirement for major users to provide forecast consumption information. This information element was identified as a possible extension to the disclosure of forecast gas production information. The Problem Assessment paper concluded that there does not appear to be a significant problem associated with a lack of this information. In contrast, this information is commercially sensitive for some major users.

Three parties (of the 14 parties who submitted on this matter) submit that this information should be disclosed. However, we consider that a problem which would warrant the disclosure of this information has not been determined. Accordingly, Gas Industry Co does not intend to progress this information element further in this workstream.

*Gas positions of thermal electricity generators*

This information element is concerned with the disclosure of thermal electricity generators' fuel positions. This information element has been picked up by the Electricity Authority as part of its Wholesale Market Information Disclosure project. Gas Industry Co is working collaboratively with the Electricity Authority on this project. We will ensure that the comments raised in submissions are picked up in that project.

**Next Steps**

The following table summarises the next steps for each of the information elements discussed in this paper.

**Table 1 Next steps for each information element**

| Information element | Next step |
|---|---|
| Gas production outages | Gas production outage information will be progressed to a Statement of Proposal (SOP). The SOP will include the identification and evaluation of options to address the identified information issues, covering both industry-led and regulatory options. This will include an evaluation of the industry-led Upstream Gas Outage Information Disclosure Code. |

| | |
|---|---|
| Gas storage facility outages | This information element will also be progressed to a SOP stage in tandem with production outages. Again, the Upstream Gas Outage Information Disclosure Code, which includes the Ahuroa gas storage facility, will be assessed as one of the options. |
| Major gas user facility outages | Given the range of views expressed in submissions, Gas Industry intends to conduct further, separate work on this issue. The next step will involve the development of a position paper which will identify whether/how to progress this issue further. |
| Transmission outages | This information element will not be progressed further at this stage. Gas Industry Co will continue to monitor the effectiveness of transmission system information disclosure. |
| GSA average price information | Gas Industry Co intends to conduct further work on this information element. A particular focus will be understanding the needs of electricity sector participants (who are the parties in submissions who predominantly want this information) and options for addressing these needs. |
| emsTradepoint price (& volume) information | This information element will not be progressed further at this stage. However, we will continue to monitor the effectiveness of information disclosure on the emsTradepoint market. |
| Gas storage facility information | Flex Gas has agreed to provide Gas Industry Co the monthly Ahuroa storage information it supplies MBIE. Gas Industry Co will publish this information on the information portal page (see below) of our website. |
| Gas production forecast information | We do not intend to advance this information element further in this workstream. Gas Industry Co will continue to work with MBIE on the timing of the release of this information. |
| Major users' forecast gas consumption information | This information element will not be progressed further in this workstream. |
| Thermal generator gas position information | This information element has been picked up as part of the EA's Wholesale Market Information Disclosure project. Gas Industry Co is working collaboratively with the EA on this project. |

As a precursor to more formal information disclosure arrangements, Gas Industry Co developed the Industry Notifications page on its website, https://www.gasindustry.co.nz/industry-notifications/. This page was launched in July 2019. This page is a place for the industry to post notifications relating to the New Zealand gas industry.

Gas Industry Co is continuing to develop an information portal on its website. The intention is that this will be a one-stop place for parties to access publicly available gas sector information. The portal will include a guide to assist in the interpretation of this information. As a first step in developing this portal, Gas Industry Co publishes updated gas production and major user consumption charts three times a week. The charts show the gas output from most major fields, and the consumption of gas by several large users[2].

[2] The data used in the creation of these charts is publicly available at the Open Access Transmission Information System (OATIS) website http://www.oatis.co.nz and the Balancing Gas Information Exchange (BGIX) http://www.bgix.co.nz

# Contents

# 1. Introduction and purpose

## 1.1 Purpose

The purpose of this paper is to provide a summary of the submissions and cross-submissions that Gas Industry Co has received on the *Information Disclosure: Problem Assessment* consultation paper ('Problem Assessment paper'). We also set out the next steps in Gas Industry Co's information disclosure workstream.

## 1.2 Introduction

Events over the last two years in the gas industry have brought an increased focus on information availability in the sector. The industry saw several production outages occurring over a relatively short space of time and this led to questions, from both within the industry and the broader energy sector, about information transparency and asymmetry in the wholesale gas market.

Further to the concerns raised by the industry, on 25 July 2018, Gas Industry Co received a letter from the Minister of Energy and Resources Hon Dr Megan Woods, where she raised her concern that if information is not required to be disclosed in a timely manner it may have a material effect on the wider market for gas. The Minister requested that Gas Industry Co investigate the current information disclosure requirements and consider whether they are adequate.

Over the course of the Gas Transmission Access Code (GTAC) workshops in 2018, several industry participants sought information disclosure by large interconnected parties as a part of their interconnection agreements. It was determined that issues relating to the transparency of outage information that may impact the gas wholesale market is an issue that requires broader consideration than the GTAC process. Parties concluded that this matter should be progressed by a separate workstream led by Gas Industry Co.

Recognising the issues and concerns identified above, Gas Industry Co established a workstream to progress issues related to information availability. This workstream will consider whether current market arrangements related to information disclosure in the wholesale gas sector are sufficient or whether further arrangements are required.

We released the *Options for Information Disclosure in the Wholesale Gas Sector* consultation paper (Options paper) in March 2019. The purpose of this paper was to provide energy sector parties (including participants in both the gas and electricity sectors) with the opportunity to comment on various issues relating to information disclosure in the New Zealand wholesale gas sector. The paper identified several possible information areas or 'information elements' where there may be problems with information transparency and asymmetry. From the consultation process we distilled 10 distinct information elements to carry forward to a formal problem assessment phase.

These 10 elements are the focus of the *Information Disclosure: Problem Assessment* consultation paper ('Problem Assessment paper'), which was released in October 2019. This paper assesses these elements against the Government's policy objectives for the gas sector,

identified in the Gas Act (1992) (Gas Act) and the Government Policy Statement on Gas Governance (2008) (GPS).

The paper represents the first step towards the development of a Statement of Proposal (SOP). The scope of a SOP is set out section 43N of the Gas Act and summarised in the Problem Assessment paper. Briefly, this scope includes a problem identification and an assessment of options for addressing the problem (including an assessment of the costs and benefits of each of the options).

Nineteen submissions on the Problem Assessment paper were received in December 2019. In February, Gas Industry Co asked for cross-submissions on three information elements where parties had markedly different views. We also published a report that we had commissioned from Contract Strategies Ltd ('The Impact of Methanex Plant Outages on the Gas Wholesale Market') on the issue of Methanex's disclosure of outages to help inform parties' cross-submissions. We received 11 cross-submissions on 11 March 2020.

Separate from this Problem Assessment process, Gas Industry Co launched the Gas Notifications page on its website in July. This is an online tool that enables gas industry parties to voluntarily post notifications of any nature. The purpose of the page is to improve the availability of information while the workstream is being progressed. The page does not replace the information disclosure workstream (or reflect any outcomes). The notifications that have been published to date span production outages at most of the major gas fields and the Ahuroa gas storage facility.

# 2. Issues Identified in Submissions

## 2.1 Information elements

The Problem Assessment paper identified the following 10 potential information elements where there may be information issues:

1. Gas production outages;
2. Gas storage facility outages;
3. Major gas user facility outages;
4. Transmission pipeline outages;
5. Bilateral contract price and volumes information;
6. emsTradepoint price and volume information;
7. Gas storage facility information;
8. Gas production forecast information;
9. Major users' forecast gas consumption information; and
10. Gas positions of thermal electricity generators.

As noted earlier, the paper assessed these elements against the Government's policy objectives for the gas sector. The submissions and cross-submissions that Gas Industry Co received on each of these elements are summarised in the remainder of this paper.

## 2.2 Submissions received

Submissions on the Problem Assessment paper were received from 19 parties:

- First Gas Limited (First Gas)
- Nova Energy Limited (Nova)
- Mercury Limited (Mercury)
- Greymouth Gas New Zealand Limited (Greymouth)
- Electricity Authority (EA)
- Trustpower Limited (Trustpower)
- Fonterra Co-operative Group Limited (Fonterra)
- Vector Limited (Vector)
- OMV New Zealand Limited (OMV)
- Haast Energy Trading Limited (Haast)
- Major Electricity Users' Group (MEUG)
- Transpower Limited (Transpower)

- Genesis Energy Limited (Genesis)
- Meridian Energy Limited (Meridian)
- Methanex New Zealand Limited (Methanex)
- Petroleum Exploration & Production Association of New Zealand (PEPANZ)
- emsTradepoint Limited (eTp)
- Major Gas Users' Group (MGUG)
- Contact Energy Limited (Contact)

Parties' submissions broadly agreed with the conclusions that Gas Industry Co reached on the many of the information elements. However, there were three areas where parties had a range of perspectives:

- Major gas user facility outages;
- Bilateral contract price and volumes information; and
- Major users' forecast gas consumption information.

Gas Industry Co asked for cross-submissions on these three information elements to give parties a further opportunity to comment on these matters. We also asked parties to share any further information they have related to the Problem Assessment paper. The cross-submissions were mostly confined to the set of three information elements. No further matters were raised.

We received cross-submissions from the following 11 parties:

- Flick Energy Ltd (Flick)
- Greymouth
- MGUG
- OMV
- Mercury
- eTp
- EA
- Vector
- Methanex
- Nova
- PEPANZ

In the remainder of this section we summarise the main themes from parties' submissions and cross-submissions for each of the information elements identified in the Problem Assessment paper.

## 2.3 Gas production outages

### 2.3.1 Problem assessment summary

Over the past two years, there has been considerable focus on the availability of gas production (including processing facilities) outage information. This focus was driven initially by the two Pohokura production outages in 2018. Interest in this information has continued with tightening gas supply conditions.

The Problem Assessment paper identified several issues associated with limited transparency and asymmetry of production outage information. For instance, the paper concluded that there are significant implications for efficiency in the gas sector and related markets from limited production outage information. There are also fairness implications, with reliability also potentially affected by a lack of information transparency. The limited and asymmetric nature of production outage information is inconsistent with the Government's outcome for good, publicly available information. Gas Industry Co considered that gas production outage information should be included in a Statement of Proposal (SOP) for information disclosure in the gas wholesale market.

### 2.3.2 Industry-led information disclosure

Following the development of the Options paper, gas producers have been voluntarily disclosing outage information using the Industry Notifications page on the Gas Industry Co website. In addition, major gas producers[3], together with PEPANZ and Flex Gas, are currently in the process of developing the industry-led Upstream Gas Outage Information Disclosure Code ('Upstream Disclosure Code'). The Upstream Disclosure Code comprises a set of rules in relation to public disclosure of information about both planned and unplanned gas outages. While voluntary, the Upstream Disclosure Code is intended to have full compliance from parties agreeing to it.

### 2.3.3 Submissions analysis

In the submissions on the Problem Assessment paper, there are no parties that disagree that gas production outages (planned and unplanned) should be disclosed in some form. This is consistent with the views expressed in the Options paper submission process. Gas Industry Co's submissions analysis on the Options paper ('Analysis of Submissions on Options for Information Disclosure') noted that "Submitters generally see upstream production outage disclosure as critical for information transparency and a well-functioning market."

However, parties have different views on the form that production outage disclosure should take. Upstream parties (Greymouth, OMV, Todd, together with PEPANZ) consider that production outages should be disclosed through an industry-led regime. This view is summarised in the draft Upstream Disclosure Code:

> Upstream gas producers… made submissions on the Options Paper, including through the Petroleum Exploration and Production Association of New Zealand Inc. The core of their submissions was that:
>
> - they agreed that information about upstream gas outages is important for a well-functioning gas market;
> - they wished to develop a voluntary, industry-led disclosure framework in relation to both planned and unplanned outage information to ensure consistent and timely information disclosure to all interested parties; and
> - they do not believe the case has been made for more widespread regulatory intervention.

Other parties (the EA, Transpower, Mercury, Meridian, eTp, First Gas, Vector, MGUG, Fonterra, Trustpower and Genesis) consider that this information element should be included in a SOP.

[3] Beach Energy (and its joint venture partners Genesis Energy and New Zealand Oil & Gas), Greymouth Petroleum, OMV and Todd Energy.

Genesis considers that a voluntary solution is unlikely to be sustainable over time, due to a reluctance of some parties to disclose information. It notes that the process of developing the Upstream Disclosure Code did not begin until the Minister's letter to Gas Industry Co and the initiation of the information disclosure workstream.

Vector submits that the (draft) Upstream Disclosure Code is an improvement on current voluntary notification arrangements. Gas Industry Co should closely monitor the Industry Notifications page for compliance and consider this code as an option with a regulated solution as a backstop should this option prove to be unsustainable.

Several parties (including the EA, eTp and Genesis) consider this element to be the largest information gap in the gas wholesale market. Most submitters on the Options and Problem Assessment papers think that further disclosure of upstream and gas storage (see below) planned and unplanned outage information should be the highest priority in Gas Industry Co's information disclosure workstream.

### 2.3.4 Gas Industry Co comment

Submitters generally agree with Gas Industry Co's problem assessment for gas production outage information. Gas Industry Co will include this information element in a SOP. Given the importance of this issue, we will prioritise the development of a SOP for this item along with gas storage outage information.

The SOP will include the identification and evaluation of options to address the identified information issues, including both industry-led and regulatory options. The Upstream Disclosure Code will be evaluated as one of these options. Where appropriate, this options analysis will consider whether the form of disclosure should be principles or rules-based (see the Options paper for further details on these disclosure forms).

## 2.4 Gas storage facility outages

### 2.4.1 Problem assessment summary

In New Zealand there is one storage operator, Flex Gas, who owns and operates the Ahuroa gas storage facility (Ahuroa). Ahuroa can currently store up to 18PJ of gas. Flex Gas currently has the ability to inject 27 TJ/day into Ahuroa and withdraw 45 TJ/day. It is expected that after a planned expansion to be completed in 2021, these volumes will both increase to 65 TJ/day, comparable to the deliverability of some gas fields.

These features mean that information issues related to outages at this facility are broadly comparable to those of a gas production facility. As such, our problem assessment for this information element was similar to the issues identified for gas production outages. In the Problem Assessment paper, Gas Industry Co considered that gas storage facility outage information should be included in a SOP for information disclosure in the gas wholesale market.

*Submissions analysis*

Parties have similar views on this information element to the points raised on gas production outages. Generally, upstream parties, together with Flex Gas, consider that gas storage facility outages should be disclosed through an industry-led regime. The draft Upstream Disclosure Code quotation in the previous section also applies to gas storage facility outages (Flex Gas is a party to this code).

Other parties (including Haast, the EA, Transpower, Mercury, Meridian, eTp, Vector, MGUG, Trustpower and Genesis) consider that this information element should be included in a SOP.

Again, Vector submits that Gas Industry Co should closely monitor compliance and consider the Upstream Disclosure Code as an option with a regulated solution as a backstop should this code prove to be unsustainable.

Many of the submitters on the Options and Problem Assessment papers think that further disclosure of upstream (see above) and gas storage facility planned and unplanned outage information should be the highest priority in Gas Industry Co's information disclosure workstream.

### 2.4.2 Gas Industry Co comment

Submitters generally agree with Gas Industry Co's problem assessment for gas storage facility outage information. Gas Industry Co will include this information element in a SOP. Given the importance of this issue, we will prioritise the development of a SOP for this item along with gas production facility outage information.

## 2.5 Major gas user facility outages

### 2.5.1 Problem assessment summary

There was a mix of supporting and opposing arguments regarding this information element in the Problem Assessment paper.

The paper suggested that this information should possibly be included in a disclosure regime because the actions of all participants affect a market, whether they are producers or consumers. A major user facility outage could potentially have a noticeable impact on the wholesale gas market, particularly given the concentrated nature of gas demand in New Zealand. This point was previously made in the Options paper. In submissions on the Options paper, several parties repeated this observation, noting that a small number of major users make up a large portion of the demand-side of the gas market and therefore should be required to disclose outage information.

The Problem Assessment paper noted that the largest cost with disclosing this information appears to relate to the potential impact that this disclosure could have on Methanex's operation. Methanex is by far the largest gas consumer in New Zealand, using over 40 percent of total gas production in recent years. With the disclosure of gas-fired electricity generators' (together, 31 percent of total gas demand in 2017) outages already covered under the Electricity Industry Participation Code (2010), Methanex is the main gas user that would be affected by major gas user information disclosure arrangements. Methanex commented in its Options paper submission that disclosure of its outages would adversely affect its international competitive position. Some upstream parties agreed that Methanex's commercial issues may warrant its exclusion from disclosure requirements.

Given these arguments, the Problem Assessment paper concluded that further information was required to reach a position on whether major user facility outages should be progressed to a SOP. Gas Industry Co encouraged parties to further inform our thinking on the matter in submissions on the paper.

### 2.5.2 Submissions analysis

Parties provided a range of views in submissions on whether this information element should be included in some form of information disclosure regime. Given these various perspectives, Gas Industry Co asked for cross submissions to give parties a further opportunity to comment on this matter. Together with a note on cross-submission issues, we also released the paper "The

Impact of Methanex Plant Outages on the Gas Wholesale Market"[4], prepared by Contract Strategies Ltd ('Contract Strategies paper'), to help inform parties in the cross-submission process. This paper provides an independent view of the issues associated with the disclosure of Methanex's plant outages. The conclusions from this report are included in the box below.

Overall, four parties do not support the disclosure of this information. These parties include Methanex, PEPANZ and the two gas producers who comment on this issue. Sixteen parties submit that major user facility outage information should be disclosed. These parties span the rest of the gas sector (including MGUG, representing five major users and Fonterra who submitted separately) and the electricity sector.

In the following discussion, we group the arguments made in submissions into several broad themes.

*A need for information transparency across the whole market*

The main argument that proponents for the disclosure of this information make relates to the need for information transparency across the whole gas wholesale market. Several parties (including Meridian, eTp, Trustpower, Genesis and Vector) reflect an observation made in the Options paper that both production and demand outages can affect the market. They argue that an information disclosure regime should capture all outage events that materially affect the market price. This transparency is required to drive market efficiency. Vector makes a related point that outage notification across both sides of the market instils confidence in the market.

Related to the previous point, several parties (including Mercury, Haast, and MGUG) pick up the point made in the Options paper that the concentration of demand in the gas sector means that an outage at one of the largest user's facilities (e.g. one of Methanex's facilities) could affect market price and supply. Accordingly, major users should disclose their outages to the market so that participants understand all the factors that affect wholesale gas market conditions.

Some electricity companies comment that a major gas user outage can have a significant flow on to the electricity wholesale market. For instance, Mercury comments in its submission that

> …during the two separate Pohokura outages in 2018 Methanex's production levels were noticeably decreased at times compared to its average or normal production. We estimate that at times during the first Pohokura outage, Methanex used roughly 77% less gas than normal and during the second outage Methanex typically consumed 50% less gas throughout the outage than normal. These are considerable variances in gas consumption which subsequently had a direct impact on gas availability and therefore the potential trading strategies of thermal electricity generators.

As we note in the comment section below, given the range of matters raised in submissions, we intend to conduct further work on this information element. However, regarding Mercury's example, we point out that the Pohokura outages resulted in the Pohokura parties supplying a reduced volume of gas to their customers, including Methanex and the electricity companies who run gas-fired plant. The reduction in supply to these customers would have been determined by the terms of their GSAs[5]. The reduction in gas supply to these parties was linked: it was caused by the same event. However, that does not necessarily imply there was a causal relationship. For example, in the second Pohokura outage (that coincided with tight wholesale electricity

[4] Contract Strategies Ltd (2020) *"The Impact of Methanex Plant Outages on the Gas Wholesale Market",* https://www.gasindustry.co.nz/dmsdocument/6901

[5] See the gas production and major user consumption charts at https://www.gasindustry.co.nz/publications/landing-pages/gas-production-and-major-consumption-charts/, which show the second outage in the latter half of 2018. These charts are created from publicly available OATIS information.

market conditions), Genesis's reduced generation from its gas-fired plant and Methanex's reduced production were linked, but one did not cause the other.

The Contract Strategies paper (see the box below) concludes that a Methanex plant outage has not resulted in either a material amount of additional gas becoming available on the wholesale gas market or a material change in the gas price on the wholesale gas trading market. Methanex agrees with this analysis. Methanex submits that if it is not fully contracted, an outage at one methanol train may result in the gas being used in its other trains. Alternatively, it may seek to place the gas in storage, either through arrangements with gas producers or at the Ahuroa gas storage facility.

MGUG is critical of Contract Strategy Ltd's analysis. It argues that with market conditions expected to tighten over the following years, past behaviour may not be a good guide to future behaviour. Vector makes a similar point in its cross-submission. The implication is an intervention (in the form of information disclosure) should be considered now because of a possible future outcome.

**The Impact of Methanex Plant Outages on the Gas Wholesale Market**

The Contract Strategies Ltd paper on the impact of Methanex outages makes the following conclusions:

- To date, a Methanex plant outage (planned or unplanned) has not resulted in:
  - a material amount of additional gas becoming available on the wholesale gas market;
  - a material change in the gas price on the wholesale gas trading market; or
  - a material impact on the efficient and effective operation of the emsTradepoint gas market;
- Disclosure of plant outage information (planned or unplanned) may have a negative commercial impact on Methanex Corporation, particularly in respect to:
  - potentially increasing the cost to Methanex Corporation to purchase methanol on the international methanol market in order to continue supplying its customers during the outage;
  - creating asymmetrical information on the international methanol market to the detriment of Methanex Corporation's international competitiveness given the opaqueness of the methanol market globally;

  although, Methanex Corporation may be able to mitigate many of the potential negative commercial impacts in respect to a planned plant outage disclosure provided sufficient allowance is provided in respect to when the outage information must be disclosed;
- Methanex has made small volumes of gas available on the emsTradepoint market on a small number of occasions in 2018 and 2019 (but nil gas in 2017). Analysis indicates that the majority of sales occurred during periods when Methanex plants were operating under normal production conditions, not during periods of plant outages. Information for production decisions is not being considered for disclosure;
- Gas producers appear to have made small additional gas volumes available on the emsTradepoint market in response to the Methanex unplanned plant outage in 2017. However, to date, any additional gas made available on the emsTradepoint market during a major gas user plant outage (Methanex or others) has had little corresponding impact on the wholesale gas prices offered. A more significant impact on the wholesale gas market volumes and prices has been seen as a result of gas production plant outages (particularly the Pohokura gas field outages); and
- There is no evidence that disclosure of Methanex NZ plant outage (planned or unplanned) information will address any information asymmetry concerns in respect to the gas wholesale market operation.

*Problem assessment should focus on domestic benefits and costs of information disclosure*

Mercury submits that gas in New Zealand is a domestic only market. It comments that there is no competitive advantage lost in a domestic sense from disclosing outage information.

*Value of information for coordinating major user planned outages*

MGUG comments that a benefit of the disclosure of major user plant outages is that it would enable the coordination of planned outages across companies. A similar pool of skilled

contractors is used across various planned outages. This would have an efficiency benefit. Jam Solutions, a project planning company, already manages a New Zealand-wide schedule of shutdowns and turnarounds for plants across all industries. This includes the Ahuroa, Ballance, Oji Fibre Solutions, NZ Steel and Pohokura production station facilities. However, this schedule only a partial coverage of the gas sector. Companies such as Methanex and Refining NZ do not supply information.

*Disclosure of plant outages would adversely affect Methanex's commercial position*

Methanex submits that the public disclosure of its outages would "very likely" harm its business. In particular, Methanex comments that the disclosure of these outages would affect its competitive position internationally, because of its need to provide an uninterrupted methanol supply to its customers. This disclosure would signal Methanex's demand for third party methanol, leading to an increased price for merchant methanol. As an example of the magnitude of potential costs, Methanex estimates that a 10 percent increase in merchant methanol (which it comments has a reasonable probability of occurring) would represent an additional cost of $US3 million. Alternatively, competitors could "short" the supply of third-party methanol to Methanex to induce customer switching.

The Contract Strategies paper supports Methanex's position (see the above box). The paper makes points similar to those made in Methanex's submission.

Upstream gas parties who comment on this issue recognise the commercial implications that the disclosure of plant outages would have on Methanex. For instance, PEPANZ comments that this disclosure would not improve market efficiency, but it would have "…negative commercial consequences on downstream users (especially Methanex)". Nova comments that the commercial interests of major gas users should not be sacrificed in the interests of greater information disclosure.

Parties supporting the disclosure of major user facility outages contend that this issue is overstated. Trustpower notes that LNG exporters made very similar claims when the Australian gas market bulletin board was extended to include outages at LNG facilities (see AEMC (2016)[6]). The disclosure obligations on LNG companies have now been in place for several years. During that time, none of the LNG exporters have submitted a proposal to the AEMC to change the disclosure rules, indicating that the commercial effects of the disclosure regime have been limited.

Similarly, Mercury comments: "We do not think there is anything particularly unique about Methanex's situation that warrants not disclosing as much information as possible." Genesis acknowledges Methanex's concerns regarding commercial implications but considers that solutions should be investigated that mitigate Methanex's business risk while still enabling the appropriate level of information to be available to the market.

MGUG does not see any negative commercial consequences in planned outages being communicated once internal arrangements have been made to cover production outages. The Contract Strategies paper makes a similar point. We note that the communication of a planned outage could limit Methanex's flexibility regarding the timing of an outage. However, once an outage has begun or even shortly beforehand (for instance), there may be limited costs to Methanex in disclosing the size and duration of the event.

*Implications of major user outages are different to production outages*

[6] Australian Energy Market Commission (2016). Stage 2 Final Report: Information Provision – East Coast Wholesale Gas Market and Pipeline Frameworks Review.

The Problem Assessment paper notes that the risks and issues associated with major gas user outages on the wholesale market are different to production outages. A production outage leads to a reduction in supply which is likely to adversely affect downstream users' operations and possibly related markets. In contrast, a major user outage may lead to no additional gas on the market or quantities may be small and there is no evidence that prices would be affected (see the conclusions in the Contract Strategies paper). For instance, most gas is supplied under long-term GSAs so the price of this gas would be unaffected.

Methanex agrees with this analysis. It comments that the risk profile associated with limited major gas user information is quite different to production information. A major gas user outage does not lead to gas security of supply concerns and nor does it lead to higher prices in the market.

First Gas also recognises that the implications of major gas users' outages on the wholesale market are different to that from production outages. However, it notes that such an event may affect the volume of gas in the wholesale market. First Gas encourages Gas Industry Co to consider this matter further.

The EA also agrees with this assessment regarding risk. It considers that the focus should be on implementing disclosure arrangements for production outages. However, the EA considers that information on major user outages is still relevant, because of the impact that additional gas supply may have on price and parties' incentives.

*Disclosure of plant outage information would capture only one of the drivers of demand*

The Problem Assessment paper pointed out that outages are only one driver of possible changes in major users' consumption. For example, a major user may make a commercial decision to have a reduced gas supply because of the market conditions it faces. Given the varied factors that may affect a major user's demand for gas, an information disclosure regime that includes major user outages may provide only limited insight into changes in major users' gas demand. Methanex's submission agrees with this point.

### 2.5.3 Gas Industry Co comment

The previous discussion illustrates that there continues to be a range of views on this information element. Gas Industry Co intends to continue its assessment of this issue and will separate the work from the other information elements in our workstream. The next step will be the development of a position paper on this matter.

## 2.6 Transmission pipeline outages

### 2.6.1 Problem assessment summary

Transmission pipeline information is part of the information disclosure regimes in all the countries reviewed in the Options paper. For instance, in Australia, capacity outlook and nominations information for transmission is a component of the East Coast Bulletin Board.

In New Zealand, operational transmission information is currently disclosed by First Gas via the Open Access Transmission Information System (OATIS) under the terms of both the Maui Pipeline Operating Code (MPOC) and the Vector Transmission Code (VTC). These two codes are expected to be replaced by a single code, the Gas Transmission Access Code (GTAC). Gas Industry Co believes that the proposed new arrangements under GTAC would provide at least the same level of information to the market as the current codes.

In the Problem Assessment paper, we commented that it appears that there are no major information issues relating to transmission pipeline outages. It is expected that the consistency of transmission outage information would improve under GTAC and its associated IT systems. If concerns relating to notifications arise after this change then we would consider them at that time. The paper concluded that there is no reason to include this information element in a SOP.

### 2.6.2 Submissions analysis

All parties that expressed a view on this information element agree that this information element should not be carried forward to a SOP. For instance, Genesis comments that any issues that currently exist are likely to be addressed by the GTAC implementation. Genesis suggests that Gas Industry Co should monitor the level, quality and usability of transmission information provided under GTAC and consider stepping in if issues arise.

### 2.6.3 Gas Industry Co comment

This information element will not be progressed further at this stage. Gas Industry Co will continue to monitor the level and quality of transmission system information provided by First Gas in our transmission workstream.

## 2.7 Contract price & volumes disclosure

### 2.7.1 Problem assessment summary

As the Options paper observed, most of the wholesale gas sold in New Zealand is via bilateral gas contracts (called gas supply agreements, or GSAs). This means that gas price information for much of the market is not visible. The paper proposed that a weighted average price for the 'bilateral contact' part of the market could be published by an independent body (such as Gas Industry Co) using price and quantity information related to these individual contracts. Upstream parties would provide contract-specific information to the independent body to enable this calculation.

Following submissions on the Options paper, the Problem Assessment paper concluded that while prices related to gas supplied under GSAs are not directly observable, the benefits of parties disclosing this information for the calculation of an average price do not appear to be large. In part, this is because GSAs are bespoke arrangements with several key terms and parameters (price is one factor amongst several other possible parameters including, for example, take-or-pay arrangements, gas banking arrangements, whether there are firm and contingent tranches of gas) that make the disclosure of price by itself (without considering other contract parameters) somewhat meaningless and potentially misleading. The paper also observed that no submissions on the Options paper identified particular costs from the lack of transparency regarding this information. The paper noted that several parties considered this information to be commercially sensitive and that the small and concentrated nature of the market means that aggregation of information would not ameliorate this issue.

Given the issues discussed in the Problem Assessment paper, Gas Industry Co proposed that this information element should not be advanced to the SOP stage.

### 2.7.2 Submissions analysis

There are a range of views on this information element in submissions on the Problem Assessment paper. Recognising this variety of submissions, Gas Industry Co asked for cross submissions to provide parties a further opportunity to comment on this matter.

Overall, five parties consider that there should be disclosure of GSA price and volume information. These parties include the EA, Mercury, Meridian, Flick and eTp. Notably all parties with the exception of eTp (operator of the emsTradepoint spot gas market) are parties that operate solely in the electricity sector (although Mercury does retail gas as a 'dual-fuel' proposition to the domestic and small business market). Mercury and Meridian stand out as the two renewables-only electricity generators of the four large New Zealand generator/retailers. Eleven parties (including First Gas, Vector, Nova, Greymouth, PEPANZ, OMV, Fonterra, Methanex, Trustpower, Genesis and Contact) consider that GSA price and volume information should not be part of an information disclosure regime. These latter parties span the entire gas sector chain and include several parties who are also participate in the electricity sector (Vector, Nova, Fonterra, Trustpower, Genesis and Contact).

MGUG considers that there is information already available in the public domain. It submits that Gas Industry Co should consider ways of adapting existing information or aggregating new information in a manner that does not compromise parties' commercial positions.

At a broad level then, parties favouring the disclosure of this information element are electricity-only companies or agencies (except for eTp). Parties not supporting this disclosure include gas sector participants, including those electricity companies that participate actively in the gas wholesale market.

In the following analysis, we group the arguments made in submissions into broad themes.

*Information is important for price discovery in the gas wholesale market*

In the Options paper, we suggested that the publication of a weighted average price would improve wholesale gas price visibility, enabling a more effective and efficient gas wholesale market. eTp supports the disclosure of GSA price and volume information for this reason. For instance, in its Options paper submission, eTp comments that the primary reason for publishing gas price, quantity and delivery period information is to enable efficient price formation and discovery in the wholesale gas market. The EA notes that transparency of gas contract prices would reduce the transactions costs involved in gas trading.

PEPANZ, OMV and Methanex submit that no problem in the gas wholesale market has been identified that would justify the disclosure of GSA price and volume information.

PEPANZ comments that it is important that any regulation should only apply to material and demonstrable market failures. It considers that such a failure has not been demonstrated. Methanex makes a similar point, arguing that Gas Industry Co's analysis and submissions have not established that there is a market failure in respect to efficient price formation in the wholesale gas market.

OMV comments that wholesale gas price discovery already occurs through Requests for Proposals (RFPs). OMV notes that it regularly responds to RFPs and enquiries for gas from wholesale gas buyers with pricing and volume indications. It assumes that other gas suppliers similarly respond to enquiries for gas. It opines that it is not difficult for market participants to have insight into wholesale gas market conditions.

Other submissions supporting the disclosure of this information element have a similar focus on price discovery. However, their attention is directed to efficient price setting in both the spot and forward electricity wholesale markets. These views are summarised under the next heading.

*Information is important for price discovery in the electricity wholesale market*

As the EA explains, thermal generation often sets the price in the wholesale electricity market (both the spot and forward markets) as the marginal form of generation in the market.

Accordingly, it is important for wholesale electricity market participants to understand the cost drivers for this generation, particularly the thermal fuel (both coal and gas) costs that make up a large part of the short run marginal cost (SRMC) of thermal generation.

Electricity sector parties supporting the disclosure of this information element submit that this information is important for their understanding of the gas price driving the SRMC of gas generation. The large renewable-only generators (Meridian and Mercury) contend that the other large generators that have thermal generation assets (Contact and Genesis) have an information advantage: the latter companies know the gas price that drives the SRMC of thermal generation, whereas renewable-only generators do not have access to this information. The renewable-only companies comment that disclosure of GSA price and volume information is important to ameliorate this advantage and enable them to compete efficiently and effectively in the electricity wholesale markets (both the spot and forward markets). Apart from the importance of this information for their wholesale market functions, these parties also emphasise the need for this information to support retail strategies and generation investment decisions.

The EA supports this disclosure for similar reasons. It comments that the "…benefits of this disclosure are regular indicators of forward curve value to support new entrants and potential investors, to encourage increased liquidity and increase efficiency… Robust disclosure of gas market information is essential for confidence in the conduct of the spot and forward electricity (hedge) markets."

Meridian and Mercury's needs for information on thermal generators' cost structures have increased following the Electricity Price Review's[7] (EPR) recommendation on market-making in the electricity forward market. The EPR's recommendation is that a mandatory market-making obligation should be placed on vertically integrated companies unless the industry can develop an effective voluntary scheme. The EA submits that "With two main market makers being gas market participants and two who are not, there is significant potential for information asymmetry to adversely affect confidence in electricity futures trading." Similarly, Meridian comments "…that any steps to improve market making need to be accompanied by strong steps to improve gas market disclosure. We ask the GIC and Electricity Authority to work together to resolve this issue with urgency."

Gas Industry Co recognises the importance of wholesale electricity market participants having an understanding of all of the cost drivers affecting the market, including the cost of thermal fuels. This information is important for these parties to engage efficiently and effectively in the wholesale electricity market. However, we question whether a composite, weighted average gas price across the gas wholesale sector (putting aside the fact that non-price terms in GSAs may make a simple price measure limited in value – see discussion below) would provide meaningful insight into the fuel costs of thermal generators. It may be that the requirements of electricity sector participants are more specific than the general price measure contemplated in this workstream. We pick this point up again below in our comments on next steps.

*Contract price and volume information would be useful for the EA to monitor trading behaviour in the electricity sector*

Related to the above discussion, the EA submits that information on bilateral contract prices would allow it to monitor trading behaviour in the electricity wholesale spot and forward markets. Our previous comment regarding the suitability of a composite, average wholesale price for understanding thermal generators' SRMCs is equally relevant to this point.

[7] Electricity Price Review (2019) *Final Report,* https://www.mbie.govt.nz/assets/electricity-price-review-final-report.pdf

*GSA price and volume information are commercially sensitive, and aggregation of information does not reduce this sensitivity*

In the Options paper, we proposed the calculation of a weighted average price for gas traded under GSAs to provide insight into wholesale gas prices. The reason why the focus was on average rather than individual prices was to address potential confidentiality issues through aggregation.

Several parties (including Vector, Nova, PEPANZ, OMV, Fonterra, Methanex and Genesis) consider that GSA price and quantity information are commercially sensitive and do not support the disclosure of this information element.

Methanex believes that it would be very difficult to maintain the anonymity of its gas contract information through the calculation of an aggregate measure. Given its share of the downstream gas sector (over 40 percent of total gas production in recent years), Methanex considers that aggregation would be unlikely to provide anonymity. In its Options paper submission, Nova made a similar point, noting that the gas market is not large enough for the terms of commercial deals to be 'hidden' through aggregation.

Genesis considers that increasing the depth of information to get around the issue that GSA contracts are typically bespoke (see next section) would risk identifying and jeopardising parties' commercial positions in commercial negotiations.

In contrast, the EA, Mercury, Meridian and eTp do not regard commercial sensitivity to be an argument against disclosure. The EA proposes the "…development of a contract price and quantity regime to be undertaken that addresses the commercial disadvantage concerns raised by submitters and strikes a balance between the benefits of disclosure and cost". It references the Electricity Hedge Disclosure System, which has been developed to disclosure hedge contract information. Mercury submits that it sees no reason why gas contract information should not be disclosed like hedge information in the electricity sector. Meridian comments broadly that it "…disagrees that disclosure of aggregated and anonymised information would disclose any commercially sensitive information." Methanex's cross-submission responds to these points, commenting that these parties suggest information should be anonymised without explaining how this could be achieved. Gas Industry Co notes that although many hedge contracts are disclosed on the Electricity Hedge Disclosure System, the 572MW New Zealand Aluminium Smelter (NZAS) contract (the largest hedge contract in the New Zealand electricity sector) is not disclosed on the hedge platform[8]. However, the fourth 50MW potline deal is disclosed on the platform.

*GSA contractual complexities mean that an aggregate price measure would be meaningless and potentially misleading*

Echoing the conclusion that Gas Industry Co reached in the Options paper, several companies (including Vector, Nova, OMV, Methanex, Trustpower, Genesis and Contract) submit that the highly bespoke nature of GSAs mean that the publication of price alone, and particularly a weighted average price, would be meaningless.

OMV comments that, with the exception of gas traded on the emsTradepoint market, 'gas' is not a standardised product and that price and volume information is not sufficient to describe the product being sold: "Our experience is that pricing can be heavily influenced by non-price terms such that the price alone can have little meaning or use to those seeking to be informed by it.

[8] Meridian does publish the full contract separately with price terms redacted, see https://www.meridianenergy.co.nz/assets/Investors/Reports-and-presentations/NZAS-contract/009a50f4ad/NZAS-Contract-Consolidated-and-Redacted-Sept-2018.pdf

We note that independent experts in price arbitration environments have made similar observations."

Methanex makes a similar argument, commenting that there are various non-price elements in its gas contracts that are part of the overall value proposition for both Methanex and its counterparties.

These two companies provide several examples of these non-price terms, including:

- The extent to which the Buyer must take or has an option to take gas, including take-or-pay arrangements.
- Liabilities that parties are exposed to for not delivering or taking contracted gas.
- The extent to which an arrangement underpins future demand or supply (for example, further investment in production from a field may be linked to a Buyer's contractual commitments).
- Contractual links to other contracts.
- Possible firm and contingent volume tranches (some volume may be subject to contingent gas in a field being 'proved up').
- Priority/interruption provisions.
- Seller relief provisions.

Trustpower and Genesis make similar points in their submissions.

OMV also comments that many contracts have terms that extend over several years. The current contracts that are 'at play' are a mix of contracts that were agreed at various points in the past reflecting wholesale gas market conditions that were expected at the time. An average of prices from these contracts is unlikely to represent parties' current expectations of forward gas wholesale market conditions. For example, Methanex announced in July 2018 that it had agreed a bilateral gas supply contract that is sufficient to supply 'more than half' of its New Zealand operations through to 2029 (an eleven-year contract). This contract was agreed before the Pohokura outage in September 2018 that led to a number of parties changing their views on forward gas market conditions. Methanex and Todd Energy also agreed a ten-year contract in 2012.

The EA considers that the issue of bespoke gas contracts is a valid concern and should be the focus of further investigation. It notes that similar issues are faced in the electricity sector but challenges with contract complexity were overcome in the development of the Electricity Hedge Disclosure System. As noted above, Mercury similarly references the electricity hedge disclosure regime. Likewise, in its Options paper submission, EnergyLink considers that the arrangements should mirror those in the electricity sector. Meridian submits that price and volume information should be disclosed and that interested parties would need to understand the limitations of the published average price information.

### 2.7.3 Gas Industry Co comment

Most gas sector parties (except for eTp) who submitted on this issue consider that GSA information should not be disclosed to enable the calculation of an average price measure. In contrast, companies who operate solely or primarily in the electricity sector, together with eTp, consider this information should be provided. Gas Industry Co recognises that electricity companies whose activities do not include gas-fired generation need to understand the gas price that thermal electricity generators face to participate effectively in the wholesale electricity

market. We intend to do further work to identify the specific issues and needs of these companies and options for how these needs might be addressed.

## 2.8 emsTradepoint price & volume disclosure

### 2.8.1 Problem assessment summary

The Problem Assessment paper concluded that emsTradepoint market information should not be included in a Statement of Proposal on information disclosure. This conclusion was made on the basis that eTp now discloses lagged Volume Weighted Average Price (VWAP), Frankley Road Natural Gas Monthly Index (FRMI) and Frankley Road Natural Gas Quarterly Index (FRQI) measures on the public facing part of its website. eTp also publishes VWAP and delivered volumes for the previous day on a ticker screen on its page. We understand that eTp is investigating the publication of lagged volume information on the public part of its website. It also offers read-only access to its platform for $5,000 p.a. Gas Industry Co commented in the Problem Assessment paper that we will continue to monitor the effectiveness of information disclosure on the emsTradepoint market.

### 2.8.2 Submissions analysis

Most parties who submitted on this information element agree with Gas Industry Co's conclusion that further emsTradepoint market disclosure is not required (Mercury, Meridian, eTp, First Gas, Vector, Nova, MGUG, Trustpower, Genesis). For instance, MGUG comments that the read-only access fee is not material to most large users who would find this information valuable.

Greymouth disagrees with Gas Industry Co's conclusion. It submits that in order to promote market efficiency, anonymised emsTradepoint live trading board information should be available publicly on a real-time basis. We note that market operators typically do not provide real-time information on their markets for free. For instance, NZX information is publicly available with a 20-minute lag.

The EA considers that further assessment of this issue should be completed. It is not supportive of any market information being behind a paywall because this creates a barrier to competition. We note that the EA misunderstands the information that eTp provides publicly. It comments that eTp should publish prices with daily rather than weekly granularity. eTp does publish daily price information on a lagged basis.

### 2.8.3 Gas Industry Co comment

Gas Industry Co confirms the conclusion reached in the Problem Assessment paper on this matter. This information element will not be progressed further at this stage. However, we will continue to monitor the effectiveness of information disclosure on the emsTradepoint market.

## 2.9 Gas storage facilities information

### 2.9.1 Problem assessment summary

In the Options paper consultation process, several parties submitted that storage levels of gas storage facilities should be disclosed. Gas storage information is included in the information disclosure regimes of several countries that Gas Industry Co reviewed in the Options paper.

Currently there is one storage facility in the New Zealand gas sector, the Ahuroa gas storage facility (Ahuroa, owned and operated by Flex Gas). Flex Gas submits Ahuroa storage level information to MBIE as part of its Quarterly Retail Sales Survey (QRSS). This information is used by MBIE to calculate a quarterly stock change figure in its gas production, transformation and

consumption data tables[9]. Flex Gas has recently agreed with MBIE to provide this information on a monthly basis. MBIE will continue to report this information as a stock change line item.

Gas Industry Co's Problem Assessment paper concluded that the limited amount of public information available on Ahuroa storage levels may potentially cause efficiency issues for parts of the sector. We noted that at least some of these issues could be addressed through Gas Industry Co discussing with MBIE the possibility of making the storage level information supplied by Flex Gas in its QRSS submission publicly available.

Gas Industry Co determined that the inclusion of this information element in a SOP would depend on whether parties (either MBIE or Flex Gas directly) would voluntarily provide more information.

### 2.9.2 Submissions analysis

Many of the submissions on this information element (including Haast, the EA, Mercury, Meridian, eTp, Vector, Greymouth, Trustpower and Genesis) consider that information on storage levels at gas storage facilities should be disclosed. A common theme in these submissions is that information issues associated with gas storage facilities are similar to those for gas production and processing facilities.

Parties have different views on the next step for this information element. Greymouth and eTp consider that gas storage facilities information should be advanced to the SOP stage. In contrast, Trustpower suggests that Gas Industry Co should publish the information, with data sourced either from MBIE or Flex Gas directly. Genesis has a similar view. Along similar lines, the EA comments that MBIE and/or Flex Gas should publish monthly data. Vector has the same position although it considers that a SOP could be another avenue to advance this issue.

### 2.9.3 Gas Industry Co comment

MBIE gathers information on Ahuroa storage levels under its regulatory powers. Gas Industry Co's preference is to avoid creating separate regulations to capture the same information.

We have discussed with Flex Gas the option of copying Gas Industry Co in on the information it supplies MBIE. Flex Gas is supportive of this idea and has received confirmation from its customers that they are happy with this approach. Gas Industry Co will publish this monthly Ahuroa storage information on the information portal page of our website.

## 2.10 Forecasts of gas production

### 2.10.1 Problem assessment summary

The Options paper considered the requirement for gas producers to provide forecast production information for the coming year. The motivation for this information element came primarily from the electricity sector. In particular, the electricity system operator commented that this information is important for assessing electricity security of supply. We understand that the system operator receives this information on a confidential basis through informal discussions but is unable to share it with other electricity sector parties because of confidentiality issues.

Under the Crown Minerals (Petroleum) Regulations 2007, producers are required to provide MBIE with gas production figures for the previous year and the proposed production profile for the projected life of the field. Producers provide this information to MBIE by 31 March each year.

[9] https://www.mbie.govt.nz/assets/Data-Files/Energy/nz-energy-quarterly-and-energy-in-nz/Gas.xlsx

MBIE publishes these annual production figures in its New Zealand Oil and Gas Reserves tables[10].

The Problem Assessment paper concluded that because producers already disclose gas production information to MBIE under the Crown Minerals (Petroleum) Regulations 2007, it does not appear to make sense for this disclosure to be replicated under further, separate arrangements. Gas Industry Co proposed that this information element should not be progressed further in our information disclosure workstream. We intended to work with MBIE regarding the timing of the publication of this information.

### 2.10.2 Submissions analysis

Parties agreed with Gas Industry Co's conclusion in the Problem Assessment paper. There was general support for Gas Industry Co working with MBIE on the publication timing for this information.

### 2.10.3 Gas Industry Co comment

MBIE gathers an array of gas exploration and production information, including production forecast information, under the Crown Minerals (Petroleum) Regulations 2007. As discussed above, MBIE already publishes production forecast information in its New Zealand Oil and Gas Reserves tables. Gas Industry Co's preference is to avoid creating separate regulations to capture the same information.

We are aware of parties' interest in having this information available sooner in the year and have discussed this issue with MBIE. MBIE is reluctant to publish information before it has checked the submitted figures for accuracy. In 2019 it published the tables in June, which was earlier than usual, and then subsequently identified a consistency issue with the data. MBIE currently expects to release the 2020 edition in July. MBIE has introduced new systems which may enable it to release information earlier in future years.

We do not intend to advance this information element further in this workstream. However, Gas Industry Co will continue to work with MBIE on the timing of the release of this information.

## 2.11 Forecasts of major users' gas consumption

### 2.11.1 Problem assessment summary

The Options paper considered the requirement for major users to provide forecast consumption information for the next 12 months. This information element was identified as a possible extension to the disclosure of forecast gas production information.

The Problem Assessment paper concluded that there does not appear to be a significant problem associated with a lack of this information. In contrast, this information is commercially sensitive for some major users. On balance, it appears that there is no net benefit associated with the disclosure of this information. We considered that this information element should not be included in a SOP, however we welcomed feedback on this position.

### 2.11.2 Submissions analysis

Eleven of the 14 parties who submitted on this information element (including the EA, Meridian, First Gas, Vector, Nova, OMV, Fonterra, Methanex, PEPANZ, Genesis and Contact) agree with the

[10] https://www.mbie.govt.nz/building-and-energy/energy-and-natural-resources/energy-statistics-and-modelling/energy-statistics/petroleum-reserves-data/

Problem Assessment analysis and our conclusion that further work on this information element is not required.

Three parties (Haast, Trustpower and eTp) consider that this information should be disclosed. A common argument made by these parties is that symmetry of information across the production and demand sides of the wholesale gas market is important because both sides of the market affect the supply and demand balance and therefore the market price.

MGUG notes that major user gas consumption information is often known or knowable. It comments that Gas Industry Co could publish public information on forecast consumption to assist information transparency.

### 2.11.3 Gas Industry Co comment

Gas Industry Co notes that any intervention should be focussed on parts of the market where there is a problem. We do consider that parties supporting the disclosure of this information element have identified a problem on the demand side of the market that would warrant the disclosure of this information. Accordingly, Gas Industry Co does not intend to progress this information element further in this workstream.

Regarding MGUG's suggestion that Gas Industry Co should publish publicly available consumption information, we note that we have recently begun publishing charts on major users' consumption. Gas Industry Co will consider opportunities for providing other publicly available information in the development of our information portal.

## 2.12 Gas positions of thermal electricity generators

### 2.12.1 Problem assessment summary

Several parties have commented that in the electricity sector there are inadequate obligations on thermal generators to provide information regarding the state of their thermal fuel (coal and gas) supplies. In contrast, inflows into the hydro lakes and lake levels, as well as snowpack levels, are publicly disclosed. The limited transparency regarding thermal generators' gas positions causes information asymmetry issues in the wholesale electricity market between electricity participants that have gas-fired plant and other market participants. This asymmetry may make it more difficult for the latter parties to participate effectively in the electricity market. The limited transparency also causes problems for the electricity system operator in managing electricity security of supply. The system operator gets this information through informal, confidential conversations with the parties that have this information. However, it is unable to share this information with other industry participants which makes the communication of security of supply issues difficult.

These parties would like information on thermal generators' fuel positions to be disclosed to address this information asymmetry and its implications for the electricity market.

In the Problem Assessment paper, Gas Industry Co proposed that this information element should be advanced by the EA as part of its Wholesale Market Information Disclosure project. This project will identify any gaps in the EA's power to require further information disclosure (such as contract fuel supplies) and strengthen disclosure rules to include information on the availability of generation fuel. Given the cross-over between the gas and electricity sectors in this instance, Gas Industry Co and the EA have agreed to work together on this workstream.

### 2.12.2 Submissions analysis

Most parties that comment on this information element (including Haast, the EA, MEUG, Mercury, Meridian, eTp, First Gas, Vector, Nova and Trustpower) support the EA taking the lead on this issue with Gas Industry Co working collaboratively with the EA. For instance, Vector "…supports this 'joined up' initiative".

Greymouth and Genesis disagree with the Problem Assessment conclusion on this matter. Greymouth considers that Gas Industry Co should consider "…all matters that may affect gas, not just gas matters. GIC should also give further thought as to whether it is in a position to consider multi-faceted energy matters." Gas Industry Co considers that the best way for addressing multi-faceted energy matters like this issue is through a collaborative approach with other agencies. We work with various agencies on a range of gas issues. Gas Industry Co is working with the EA on this information element as well as other energy sector matters.

Genesis submits that it is not practical or appropriate for thermal electricity generators to disclose their gas fuel book. Genesis makes several arguments supporting this position. For instance, Genesis comments that gas availability is only one of several factors that drives decisions on how and when it operates its various generation assets. Nova supports Genesis's arguments. These points are being considered in the EA's Wholesale Market Information Disclosure project.

### 2.12.3 Gas Industry Co comment

This information element has been picked up as part of the EA's Wholesale Market Information Disclosure project. Gas Industry Co is working collaboratively with the EA on this project. We will ensure that the comments raised in submissions are picked up in that project.

# 3. Summary of Next Steps

In this section, we summarise the next steps for each of the information elements. We also comment on progress in other Gas Industry Co work on information disclosure matters.

The following table summarises the next steps for each of the information elements discussed in this paper.

**Table 2 Next steps for each information element**

| Information element | Next step |
|---|---|
| Gas production outages | Gas production outage information will be progressed to a Statement of Proposal (SOP). The SOP will include the identification and evaluation of options to address the identified information issues, covering both industry-led and regulatory options. This will include an evaluation of the industry-led Upstream Gas Outage Information Disclosure Code. |
| Gas storage facility outages | This information element will also be progressed to a SOP stage in tandem with production outages. Again, the Upstream Gas Outage Information Disclosure Code, which includes the Ahuroa gas storage facility, will be assessed as one of the options. |
| Major gas user facility outages | Given the range of views expressed in submissions, Gas Industry intends to conduct further, separate work on this issue. The next step will involve the development of a position paper which will identify how/whether to progress this issue further. |
| Transmission outages | This information element will not be progressed further at this stage. Gas Industry Co will continue to monitor the effectiveness of transmission system information disclosure. |
| GSA average price information | Gas Industry Co intends to conduct further work on this information element. A particular focus will be understanding the needs of electricity sector participants (who are the parties in submissions who predominantly want this information) and options for addressing these needs. |
| emsTradepoint price (& volume) information | This information element will not be progressed further at this stage. However, we will continue to monitor the effectiveness of information disclosure on the emsTradepoint market. |
| Gas storage facility information | Flex Gas has agreed to provide Gas Industry Co the monthly Ahuroa storage information it supplies MBIE. Gas Industry Co will publish this information on the information portal page (see below) of our website. |
| Gas production forecast information | We do not intend to advance this information element further in this workstream. Gas Industry Co will continue to work with MBIE on the timing of the release of this information. |

| | |
|---|---|
| Major users' forecast gas consumption information | This information element will not be progressed further in this workstream. |
| Thermal generator gas position information | This information element has been picked up as part of the EA's Wholesale Market Information Disclosure project. Gas Industry Co is working collaboratively with the EA on this project. |

As a precursor to more formal information disclosure arrangements, Gas Industry Co developed the Industry Notifications page on its website, https://www.gasindustry.co.nz/industry-notifications/. This page was launched in July 2019. This page is a place for the industry to post notifications relating to the New Zealand gas industry.

Gas Industry Co is continuing to develop an information portal on its website. The intention is that this will be a one-stop place for parties to access publicly available gas sector information. The portal will include a guide to assist in the interpretation of this information. As a first step in developing this portal, Gas Industry Co publishes updated gas production and major user consumption charts three times a week. The charts show the gas output from most major fields, and the consumption of gas by several large users[11].

[11] The data used in the creation of these charts is publicly available at the Open Access Transmission Information System (OATIS) website http://www.oatis.co.nz and the Balancing Gas Information Exchange (BGIX) http://www.bgix.co.nz

# Glossary

| | |
|---|---|
| AEMC | Australian Energy Market Commission |
| Ahuroa | Ahuroa Gas Storage Facility |
| EA | Electricity Authority |
| EMI | Electricity Market Information website |
| EPR | Electricity Price Review |
| eTp | emsTradepoint |
| FRMI | Frankly road natural gas monthly index |
| FRQI | Frankly road natural gas quarterly index |
| Gas Act | Gas Act (1992) |
| GIC | Gas Industry Co |
| GJ | Gigajoule |
| GPS | Government Policy Statement on Gas Governance (2008) |
| GSA | Gas supply agreement |
| GTAC | Gas Transmission Access Code |
| LNG | Liquefied Natural Gas; natural gas that has been cooled down to liquid form (around -162ºC) for ease and safety of non-pressurised storage or transport |
| MBIE | Ministry of Business, Innovation and Employment |
| MEUG | Major Electricity User Group |
| MGUG | Major Gas Users Group (comprising Ballance Agri-Nutrients Ltd, Fonterra Co-operative Group, New Zealand Steel Ltd, Oji Fibre Solutions Ltd, Refining NZ) |
| MPOC | Maui Pipeline Operating Code |
| OATIS | Open Access Transmission Information System; the current gas transmission IT system |
| PEPANZ | Petroleum Exploration and Production Association of New Zealand |
| PJ | Petajoule |
| POCP | Planned Outage Co-ordination Process website |

| | |
|---|---|
| QRSS | Quarterly Retail Sales Survey, managed by MBIE |
| SRMC | Short run marginal cost |
| SOP | Statement of Proposal, defined in s43N of the Gas Act (1992) |
| TACOS | Transmission Access Commercial Operating System; GTAC gas transmission IT system |
| UTS | Undesirable trading situation |
| VTC | Vector Transmission Code |
| VWAP | Volume weighted average price |

# ABOUT GAS INDUSTRY CO

Gas Industry Co is the gas industry body and co-regulator under the Gas Act. Its role is to:

- develop arrangements, including regulations where appropriate, which improve:
  - the operation of gas markets;
  - access to infrastructure; and
  - consumer outcomes;
- develop these arrangements with the principal objective to ensure that gas is delivered to existing and new customers in a safe, efficient, reliable, fair and environmentally sustainable manner; and
- oversee compliance with and review such arrangements.

Gas Industry Co is required to have regard to the Government's policy objectives for the gas sector, and to report on the achievement of those objectives and on the state of the New Zealand gas industry.