Statement of Proposal: Downstream Reconciliation Rules Review

Date issued: 26 July 2012
Submissions close: 3 September 2012

GAS INDUSTRY COMPANY LIMITED

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.

Gas Industry Co's corporate strategy is to 'optimise the contribution of gas to New Zealand'.

Authorship

This paper was prepared by the Market Operations Group

Submissions close: 3 September 2012

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Executive summary

This Statement of Proposal forms the next step in Gas Industry Co's review of the Gas (Downstream Reconciliation) Rules 2008 ('the Rules' or 'the Reconciliation Rules'). In December 2011, the Downstream Reconciliation Options Paper ('the Options Paper') was published by Gas Industry Co which explained that a review of the Rules was appropriate given they had been in operation for over three years. The review is not a fundamental review of the intent and purpose of the Rules. Gas Industry Co is of the view that the Rules themselves function well—they permit the efficient and orderly operation of the downstream reconciliation system for the New Zealand gas market. Rather, the review seeks to improve specific aspects of the Rules.

The Options Paper outlined a range of issues that Gas Industry Co, allocation participants and the allocation agent had identified with the Rules. Various options were presented for each of these issues and stakeholders were invited to provide submissions on these issues/options. Based on the submissions it received, Gas Industry Co established a downstream reconciliation advisory group (DRAG) to assist development of the rules amendments. This advisory group approach mirrored the strategy used by Gas Industry Co in 2006 when the Rules themselves were being developed, and established a constructive forum for thinking through how proposed rules would work in practice based on the experience of the members present. Members of the DRAG were drawn from a range of organisations, including distribution companies and retailers. Their work was instrumental in the development of the draft rules presented in this Statement of Proposal, and Gas Industry Co is grateful for their input.

At the same time that Gas Industry Co formed the DRAG, the Company advised industry participants that it would be splitting the issues from the Options Paper into two separate Statements of Proposal. All of the options for changing the initial allocation would be deferred to a second Statement of Proposal due by June 2013. This decision was made because it would be unlikely that the options for the initial allocation would be ready to be included in a Statement of Proposal by mid-2012. Each of the options for the initial allocation would require further investigation by Gas Industry Co, testing by the allocation agent and trialling of any new processes by reconciliation participants. The DRAG would also consider those options further. The remainder of the issues from the Options Paper are addressed in this Statement of Proposal.

What is included in this Statement of Proposal?

For the most part, these rule changes are all geared towards reducing the compliance costs and administrative costs associated with imperfections discovered with the Rules, as far as possible, without compromising the operation and purpose of the Rules. This Statement of Proposal contains recommended rule changes for the following issues.

Atypical gas gates

Since the Rules went live there have been a number of exemptions granted for gas gates where the application of the standard global allocation methodology is either unsuitable, unnecessary or invalid. The exemptions cover gas gates with a single consumer installation directly connected to the transmission system, gas gates where there is either no meter measuring delivered quantities or the meter is oversized relative to present-day gas flows, and gas gates where the dominance of time-of-use (TOU) metered customers distorts the allocation of UFG to non-TOU customers. The exemptions were granted in the first instance to allow a smooth transition to the new reconciliation regime, with the intention of revisiting the policy decision to determine a longer term solution after some experience of the new system in operation. This Statement of Proposal recommends the creation of rules to deal with each class of exemption. Draft rules are discussed for direct connect gas gates, unmetered and oversized metered gas gates, and the application of the global 1-month methodology.

Correction of Annual UFG factors

Annual UFG factors (AUFGs), as calculated according to rule 46.3.1, are used to allocate quantities of gas to allocation groups 1 & 2 at each gas gate. The allocation agent is required to calculate and publish AUFGs by the first business day of July for the following gas year (October through September). There have been at least two instances where the data used to calculate the AUFG factor for a gas gate has been found to be erroneous subsequent to the publication of the AUFG factor. The Rules contain no explicit provision to correct erroneous AUFG factors. A new rule is proposed enabling the correction of AUFG factors where they are found to be materially incorrect.

Compliance-related issues

Three issues that routinely result in the allocation agent alleging breaches, and for which Gas Industry Co has received feedback seeking rule changes, are estimated TOU data, the provision of corrected injection quantities, and late trading notifications.

Retailers must provide 'actual' daily energy quantities for consumers in allocation groups 1 & 2. However, if for any reason they are unable to provide those data, retailers will receive three breach notices (one for each allocation stage) despite at most only one error having occurred. The Options Paper presented four options for reducing the compliance burden in these circumstances.

A similar issue applies whenever transmission system owners (TSOs) are unable to provide 'actual' daily injection quantities as per rule 41. However, unlike the former situation, an exemption was recently granted allowing TSOs to apply corrections to injection information in certain circumstances. This exemption reflected that corrections are an accepted practice under upstream contractual arrangements and there is a clearly defined methodology for applying corrections that is likely to provide a more accurate result than an allocation agent estimate.

The third case of the allocation agent regularly issuing breaches is for late trading notifications. Rule 39 requires retailers to notify the allocation agent whenever they commence or cease to supply any customer installations at a gas gate or commence or cease a transmission services agreement at a gas gate. This information has to be notified by the third business day of the month after supply commences or ceases in order to be incorporated in the initial allocation run. In the Options Paper, Gas Industry Co asked participants what the cause of those breaches was and whether there were any suggested remedies for alleviating them.

Rule changes are proposed for each of the three situations above to remove the compliance burden to participants, the allocation agent and Gas Industry Co in administering breaches and/or exemptions processes in these circumstances.

Apportionment of ongoing fees

An issue presented in the Options Paper and further discussed by the DRAG was whether the methodology for allocating ongoing fees should be revisited. The current method uses allocated volumes as the basis for apportioning the monthly fee between retailers, which results in retailers with 'high-use' customers paying a large proportion of the fees. These retailers question the fairness of this approach and promote an allocation on the basis of ICP market share as being more favourable. The Options Paper considered different options for apportioning fees. Gas Industry Co has undertaken further assessment of this issue and this paper presents the argument that, on a 'beneficiary-pays' basis, it is fair that costs are allocated according to volumes. The proposal is therefore to retain the status quo cost allocation methodology.

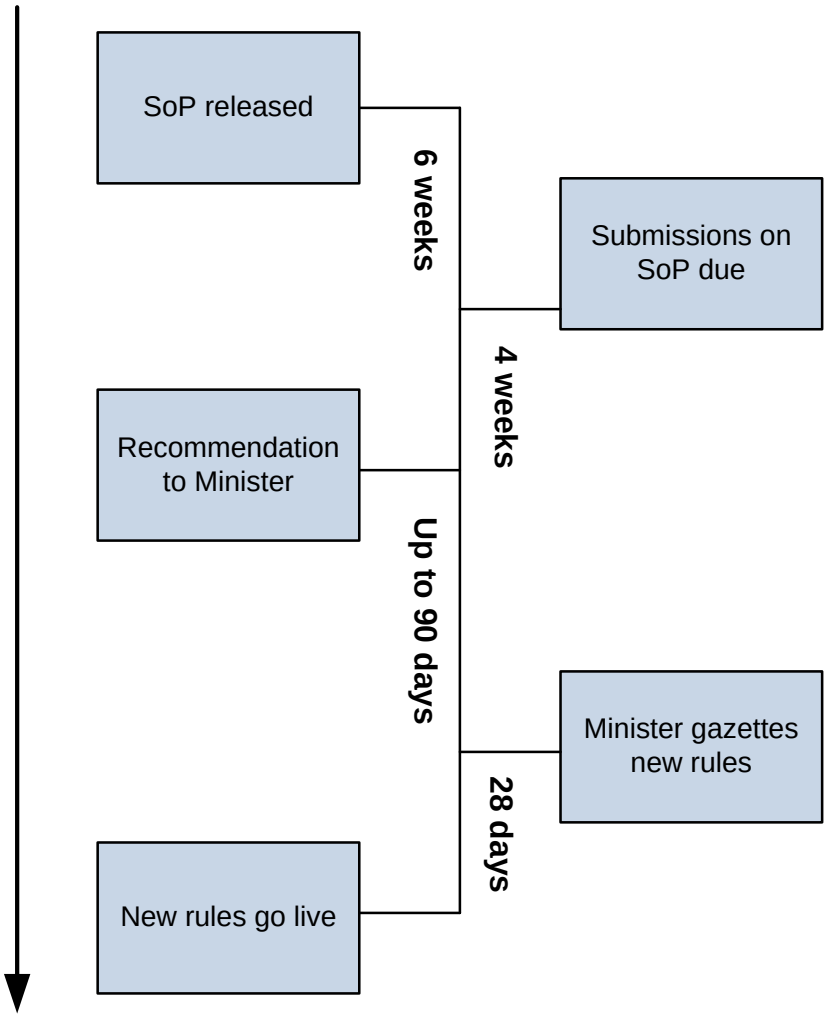
Various other issues discussed by the DRAG

The DRAG discussed a variety of issues that were not included in the Options Paper. Many of those issues were considered minor and technical amendments to the Rules. However, there were five issues discussed that are included in this Statement of Proposal that cannot be considered minor and technical. Where feasible, this Statement of Proposal offers options and/or a recommendation for each of these issues. They are:

- the ability to audit specific gas registry fields relevant to the Rules;
- a proposed amendment to the method of allocating event audit costs;
- a requirement to audit major system changes;
- the removal of rule 42 which requires the TSO to provide estimated day-end injection quantities each day; and
- publication of the GAR170.

Next steps

Submissions are welcome on this Statement of Proposal no later than 5pm on Monday 3 September 2012. Gas Industry Co will consider any submissions before making a Recommendation to the Minister of Energy and Resources. The Minister will have 90 days to consider the recommendation. Provided that the Minister gazetted the recommended rules, the go-live date for the new rules would be 28 days after the gazetted date.[1]



[1] Refer to section 10.4 for further discussion on when the new rules will go-live.

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1 Introduction

1.1 Background

This Statement of Proposal follows on from the Options Paper that was published by Gas Industry Co in December 2011. Gas Industry Co published the Options Paper as a first step in reviewing the Reconciliation Rules. The purpose of the review is, given that the Rules have been in operation for more than three years, to identify possible areas to improve the Rules and to tidy up any issues with the operation of the Rules that have been identified by allocation participants, the allocation agent, or Gas Industry Co.

The review does not consider changes to the intent and purpose of the Rules. Gas Industry Co is of the view that the Rules are operating well: they permit the efficient and orderly operation of the downstream reconciliation system for the New Zealand gas market.

Additional background material is available in the Options Paper and at the Downstream Reconciliation section of Gas Industry Co's website (http://gasindustry.co.nz/work-programme/downstream-reconciliation/consultation).

1.2 Statutory context

Regulatory objective

The Government Policy Statement on Gas Governance 2008 (the GPS) sets out the Government's objectives and outcomes for governance of the New Zealand gas industry, and its expectations for industry action. Under section 43ZO of the Gas Act 1992 (the Act), Gas Industry Co must have regard to the objectives and outcomes set out in the GPS when making recommendations to the Minister for Gas Governance rules or regulations.

The Government's principal policy objective for the gas industry, as stated in section 43ZN of the Act and echoed in the GPS, is:

> 'To ensure that gas is delivered to existing and new customers in a safe, efficient, and reliable manner.'

With regards to downstream reconciliation the GPS seeks the following outcome:

> Accurate and timely arrangements for the allocation and reconciliation of downstream gas quantities.

Given this review does not propose to amend the fundamental intent and purpose of the Rules, the purpose of the existing rules is also a crucial determinant in setting the regulatory objective of this review. The purpose of the Rules is:

> '…to establish a set of uniform processes that will enable the fair, efficient, and reliable downstream allocation and reconciliation of downstream gas quantities.'

These provide the context for the regulatory objective applying to all of the proposals in the current Statement of Proposal. The amendments seek to improve the operation and efficiency of the processes for ascertaining the quantities that each retailers' customers have consumed downstream of the connection to the transmission or distribution system.

Rule making powers

Section 43F(2) of the Act provides that gas governance regulations (and gas governance rules in accordance with section 43Q) may be made for any of the following purposes (amongst others):

> '(a) providing for the establishment and operation of wholesale markets for gas, including for –
>
> - (i) protocols and standards for reconciling and balancing gas:
> - (ii) clearing, settling, and reconciling market transactions:
> - (iii) the provision and disclosure of data and other market information:
> - (iv) minimum prudential standards of market participation:
> - (v) minimum standards of market conduct:
> - (vi) arrangements relating to outages and other security of supply contingencies:…'

In order to reconcile and balance the quantities of gas purchased by retailers on the wholesale gas market, it is necessary to have processes for ascertaining the quantities that each of those retailers' customers have consumed downstream of the connections to the transmission system (i.e. items (i), (ii), and (iii) in the list above). The rule amendments proposed in this Statement of Proposal are also considered to come within the same rule making powers in sections 43F and 43Q of the Act.

Gas Act requirements for recommending rule changes

Sections 43L, 43N and 43Q of the Act set out the requirements for making recommendations for gas governance rules or rule changes.

Under section 43ZL, before making a recommendation to the Minister, Gas Industry Co must:

> (a) undertake an assessment under section 43N; and
> (b) consult with persons that Gas Industry Co thinks are representative of the interests of persons likely to be substantially affected by the proposed rule changes); and
> (c) give those persons the opportunity to make submissions; and

(d) consider those submissions.

Section 43N(1) requires that, before making a recommendation to the Minister, Gas Industry Co must:

(a) seek to identify all of the reasonably practicable options for achieving the objective of the [rule change]; and
(b) assess those options by considering:

  (i) the benefits and costs of each option; and
  (ii) the extent which the objective would be promoted or achieved by each option; and
  (iii) any other matters considered to be relevant; and

(c) ensure that the objective of [the proposed Rule change] is unlikely to be satisfactorily achieved by any reasonably practicable means other than the making of the [rule change]; and
(d) prepare a statement of proposal for the purpose of consultation under section 43L(1).

In this Statement of Proposal the reasonably practicable options and costs and benefits of each option are set out after each preferred option is described.

Simplified process where section 43N(3) applies

A simplified process can apply in the following circumstances under section 43N(3) of the Gas Act:

> Gas Industry Co…is not required to comply with subsection (1) if it is satisfied that the effect of the recommendation is minor and will not adversely affect the interests of any person in a substantial way.

Section 9 of this Statement of Proposal sets out all the proposed minor and technical amendments for which Gas Industry Co considers s43N(3) applies.

1.3 Downstream Reconciliation Advisory Group

In order to assist Gas Industry Co in progressing the review, the DRAG was established in March 2012. The DRAG comprises six industry members selected for their expertise in downstream reconciliation. The DRAG's main function was to consider and assist Gas Industry Co in developing and drafting rule changes. Utilising the DRAG's expertise also enabled Gas Industry Co to consider additional options not discussed in the Options Paper and to assess all options according to their relative strengths and weaknesses. Where relevant throughout this Statement of Proposal, reference will be made to discussions the DRAG had on certain issues.

The DRAG met on a regular basis. Meeting material for all DRAG meetings is available on Gas Industry Co's website (http://gasindustry.co.nz/work-programme/working-group/downstream-reconciliation-advisory-group). While the DRAG was instrumental in the design of many of the rule changes mentioned in this document, throughout the process Gas Industry Co retained the discretion as the industry body to make policy recommendations to its Board.

1.4 Two Statements of Proposal

In the Options Paper, Gas Industry Co indicated that it intended to issue a Statement of Proposal in June 2012. Having considered the submissions received on the Options Paper, Gas Industry Co decided that for the options relating to alternative approaches to the initial allocation it would be unlikely that any new or amended rules would be ready to be included in a Statement of Proposal by that time. Each of the options for the initial allocation would require further investigation by Gas Industry Co, testing by the allocation agent and, perhaps, trialling of any new processes by reconciliation participants. In its summary of submissions for the Options Paper, Gas Industry Co explained that it would carry out an additional process for the initial allocation options with an eye to having them included in a Statement of Proposal by June 2013. The DRAG would also consider those options further.

The remainder of the issues from the Options Paper are addressed in this Statement of Proposal with the exception of some proposals which, after submissions on the Options paper and discussion with the DRAG, will not be pursued any further. Section 2 of this paper outlines the issues that will not be progressed any further in this Statement of Proposal. Section 3 outlines the issues that will be progressed in this Statement of Proposal, which are then analysed more deeply in the following sections.

1.5 Submissions

Submissions are invited from stakeholders on this Statement of Proposal. Submissions should be provided no later than 5pm on Monday 3 September 2012. Please note that submissions received after this date will not be considered.

Submissions can be made by logging on to the website (www.gasindustry.co.nz), navigating to the Downstream Reconciliation work programme and uploading your submission in the "Statement of Proposal" section.[2] All submissions will be published on the website after the closing date. Submitters should discuss any intended provision of confidential information with Gas Industry Co prior to uploading their submissions

The recommended format for submissions is attached as Appendix A and may be downloaded in MS Word format from the Consultation page on the website.

[2] Gas Industry Co no longer accepts submissions by email. Parties who are unfamiliar with the procedures for uploading submissions can search the website for 'help for new users'. Alternatively, please call Tim Herbert on 04 472 1800 for assistance,

2 Issues not progressed in this Statement of Proposal

The issues discussed in this section were included in the Options Paper but will not be progressed in this Statement of Proposal. In the case of the initial allocation, the DRAG will continue to work towards analysing a preferred option to be included in a separate Statement of Proposal by June 2013. For the remaining issues, Gas Industry Co has decided that the status quo represents the most reasonably practicable option.

2.1 Initial allocation

Gas Industry Co decided to split the work from the Options Paper into two separate Statements of Proposal. This was done because of the likely longer lead time needed to implement whichever options were selected to be progressed for the initial allocation. The options for the initial allocation each would require further investigation by Gas Industry Co, testing by the allocation agent and, perhaps, trialling of any new processes by reconciliation participants, making it unlikely they would be ready for inclusion in this Statement of Proposal.

While the DRAG agreed that it would have been preferable for there to have been only one Statement of Proposal, it appreciated that the work for the initial allocation could potentially delay implementing the first round of necessary rule changes by up to one year.

One of the alternatives to the initial allocation proposed in the Options paper was a methodology which preferentially allocates UFG to causers on the basis of a moving average of each retailer's estimation accuracy. Although this option received some support in submissions to the Options Paper, it is unlikely that it will be progressed in the next Statement of Proposal. The results of analysis conducted to date suggest that whilst this methodology operates effectively as a punitive measure on retailers with a history of poor estimation, it does not provide results which are closer to the interim or final allocations than the current initial allocation, and that would not be a better fit with the regulatory objective.

2.2 Breach notifications to meter owners

Currently, the Rules do not impose any obligations on meter owners other than ensuring their metering equipment complies with NZS5259:2004. Rules relating to metering otherwise place the

compliance burden on retailers. The Options Paper asked submitters whether they thought a new rule enabling the allocation agent to breach meter owners directly was a good idea.

Submissions were divided on this matter. Most submitters believed that as metering providers were contracted by retailers, if a metering problem was causing the retailer to receive breach notices then the contract between the two parties ought to be the appropriate avenue to address the performance of the relevant meter owner. A minority of submitters believed that enabling a rule change such that meter owners could be directly breached was a good idea.

This issue was discussed by the DRAG. There was a consensus among DRAG members that, beyond the general obligation for meter owners to ensure that their metering equipment is compliant with NZS5259:2004, commercial arrangements provide sufficient obligations on meter owners. Ultimately, meter owners are operating in a contestable environment so if their performance was considered unsatisfactory, and issues with performance could not be resolved contractually, retailers are free to shop around for metering providers they consider would perform at a higher level.

The DRAG did suggest to Gas Industry Co that thought should be given to creating guidelines or principles for metering contracts similar to work that Gas Industry Co has undertaken on distribution contract principles. While Gas Industry Co agrees with the DRAG that a standard template in the form of either guidelines or contract principles would help provide a degree of clarity on typical clauses that could be expected to form a standard retailer-metering provider contract, a key rationale for providing other contract templates is not present in the retailer-metering provider space. That is, given the competitive markets that are present for retailers and for metering providers, it is unlikely that there would be a monopoly bargaining position held by either party. Therefore, alternate terms and conditions are more likely to be negotiable between parties and the need for a contract template is diminished. However, if there is continued demand for guidelines on metering contracts, Gas Industry Co will give consideration to including this in the future work programme.

Gas Industry Co agrees with the DRAG and the majority of submitters on the Options Paper that commercial arrangements ought to provide sufficient obligations on meter owners for the purposes of the Rules. Therefore, Gas Industry Co does not intend to proceed with the creation of a new rule imposing further obligations on meter owners.

A related issue is discussed in Section 8.1 of this Statement of Proposal. Gas Industry Co proposes to progress a rule change regarding the scope of audits such that allocation participants, including meter owners, will be audited on their obligation to populate and maintain the gas registry parameters for which they are responsible in an accurate and timely manner.

Q1:	*Do you agree that commercial arrangements provide sufficient obligations on meter owners for the purpose of the Rules? With regard to the suggestion by the DRAG, do you consider there is an identifiable market failure that merits Gas Industry Co developing a workstream on the creation of guidelines and/or principles for metering contracts?*

2.3 Exemptions process

Before the Rules went live in 2008, there were a range of matters identified that needed to be addressed by way of exemptions. It became apparent that the new rules would not handle all circumstances or situations that would occur in practice. The exemptions granted were therefore a pragmatic way of dealing with unforeseen circumstances and, in some instances, provided participants a degree of breathing space to achieve full compliance. Given that the Rules have been in operation for longer than three years and that all of the outstanding exemptions will be resolved in the course of this review, Gas Industry Co considered that there would be little need to allow for exemptions of the Rules going forward, especially as the processing and monitoring of exemptions adds to the administrative burden of Gas Industry Co, the allocation agent and the affected allocation participants. Gas Industry Co's opinion therefore was that the exemption provisions should be removed from the Rules.

Submitters were asked whether they supported Gas Industry Co's proposal and if they did not, which option they preferred from retaining the status quo or more prescriptively outlining the circumstances that will and will not warrant an exemption. Submitters were unanimous in their support for retaining the exemption process, though some did favour a more prescriptive approach.

This issue was discussed by the DRAG. Members noted that most of the matters that have been the subjects of exemptions would be resolved during the present review process, for example, the treatment of atypical gas gates or the correction of an annual UFG factor. Given most of the exemptions would be incorporated into the Rules, the remaining exemptions process would be used only as required.

Based on the DRAG's discussion, Gas Industry Co agrees that the exemption provisions are useful if and when unexpected situations arise. One such example followed the sale of the E-Gas customer base to Nova, when the exemptions process was used because the Rules did not envisage a mass reassignment of gas consumers in the middle of a consumption month. The exemption allowed for the creation of a deemed profile to ensure that the amounts allocated to Nova and E-Gas for respective days of the consumption month were fair and accurate, and therefore better met the purpose of the Rules than the standard allocation methodology would have.

Gas Industry Co therefore agrees with submitters and with the DRAG that the exemptions process is useful and that it should be retained in its current form. Removing the process from the Rules risks deleting a useful workaround that has been needed in the past to ensure that allocations are fair and accurate and reflect the purpose of the Rules. Gas Industry Co will undertake to review the current guideline published on its website regarding the exemptions process to ensure that the right balance is struck between a prescriptive and permissive approach.

Q2:	*Given that the review will cover all of the long-standing exemptions do you agree that the exemptions process should be retained?*

3 Issues addressed in this Statement of Proposal

This section briefly summarises the issues which are discussed in this Statement of Proposal.

3.1 Atypical gas gates

Shortly after go-live the application of the global allocation methodology was found to be impractical for a number of gas gates and that the purpose of the Rules would not be furthered by applying the Rules at those gates. Those difficulties were temporarily resolved by the exemption provisions in the Rules until such time that a review of the Rules was carried out. This review of the Rules enables Gas Industry Co to consider how to best deal with the atypical gas gates.

Section 4 of this Statement of Proposal addresses the range of atypical gas gates that are currently dealt with using exemptions – direct connect gas gates, global 1-month gas gates, unmetered gas gates and oversized metered gas gates.

3.2 Apportionment of ongoing fees

An issue presented in the Options Paper and further discussed by the DRAG was whether the methodology for allocating ongoing fees should be revisited. The current method uses allocated volumes as the basis for apportioning the monthly fee between retailers, which results in retailers with 'high-use' customers paying a large proportion of the fees. These retailers question the fairness of this approach and promote an allocation on the basis of ICP market share as being more favourable. The Options Paper considered different options for apportioning fees and these were discussed in the DRAG but no consensus was achieved. Section 5 further analyses this issue.

3.3 Correction of annual UFG factors

The AUFG factor is the fixed factor used to allocate UFG to allocation group 1 and 2 customers for a gas gate. There have been instances in the past where the data used to calculate an AUFG factor have been found to be erroneous, to the extent that materially different allocations have, or would have, resulted. The Rules do not contain a provision to enable the correction of erroneous AUFG factors so in those cases the compliance arrangements and the exemption processes were used to rectify harm and provide for a correction respectively.

Section 6 outlines a proposal to create a specific rule to enable the correction of AUFG factors in certain circumstances.

3.4 Compliance related issues

Estimated data for TOU sites and corrected injection quantities

The Rules require that retailers provide actual daily energy quantities for each customer installation in allocation groups 1 & 2. If for any reason a retailer is unable to provide that data, they will ultimately receive three breach notices from the allocation agent (one for each allocation stage). The Rules also require that, where retailers cannot provide actual daily energy quantities, they must provide their best estimate of consumption information.

In the Options Paper it was proposed that the 'most favoured nation' status of allocation groups 1 & 2 (ie the application of a fixed UFG factor) is only justifiable if accurate, non-estimated data is being provided. Participants were asked in the Options Paper which of four options they favoured to address missing or estimated TOU data.

A related issue is the requirement for transmission system owners to provide actual daily energy quantities injected at each gas gate to the allocation agent. Again this requirement does not allow for estimation or correction and this has been the subject of recent compliance activity and the motivation for an exemption currently in place.

Section 7.1 discusses how Gas Industry Co intends to progress this issue for the purposes of this review.

Trading notifications

On occasion, the allocation agent is required to allege breaches of rule 39 which requires retailers to notify the allocation agent whenever they commence or cease to supply to any customer installations at a gas gate or when they commence or cease a transmission services agreement in respect of gas supplied at a gas gate. This information has to be notified by the third business day of the month after supply commences or ceases in order to be incorporated in the initial allocation run. In the Options Paper, Gas Industry Co asked participants what the cause of those breaches was and whether there were any suggested remedies for alleviating them.

Section 7.2 discusses that feedback and Gas Industry Co's intended policy response.

3.5 Issues discussed by the DRAG

In addition to the issues discussed in the Options Paper, the DRAG discussed a range of matters that are new material for the purposes of the review. These additional issues are discussed in Section 8, including:

- providing for performance audits to be carried out on parties responsible for fields in the registry which retailers rely on to be accurate for the purpose of generating consumption data and submission files;
- a proposed amendment to the method of allocating event audit costs so that the auditor can take into account the proportionality of any material issues discovered when determining who is responsible for audit costs;
- providing for performance audits of allocation participants to be carried out prior to a major system change that has the potential to impact on their compliance with the Rules, to ensure compatibility between the new system and the reconciliation process;
- removal of rule 42, which relates to the publication of estimated day-end injection quantities. This rule is currently the subject of an exemption for certain days and gas gates but, more generally, is considered by the DRAG to be redundant, given the transparency of this information under the Vector Transmission Code; and
- making the GAR170 report (currently restricted to Gas Industry Co only) available to all retailers. This report summarises retailers' monthly submissions by gas gate and allocation group and is used for market monitoring and to investigate anomalies in allocations.

3.6 Minor and technical amendments

A number of additional minor and technical amendments are proposed in Section 9. Because these will not adversely affect the interests of any person in a substantial way, Gas Industry Co does not have to present a full range of options for these matters (as per s43N(3) of the Gas Act). The issues discussed are:

- future-proofing the reference in the Rules to NZS5259;
- changing the calculation of the SADSVs to remove allocation groups 3 and 5;
- allowing for special allocations to replace (instead of being in addition to) an initial, interim or final allocation;
- minor amendments to the provisions for the estimation, collection and wash-up of ongoing fees;
- giving of notices by the allocation agent;
- deleting the transitional provisions.

4 Atypical gas gates

The Options Paper mentioned that when the Rules commenced, the application of the global allocation methodology was found to be impractical for a number of gas gates and some participants had not grasped the full extent of the obligations placed on them by the Rules. Where difficulties were discovered they were dealt with by Gas Industry Co considering whether or not to grant an exemption from the Rules in each case. Where exemptions were granted they were done so on the understanding that the relevant issues would be considered in the forthcoming policy review of the Rules.

Based on the view put forward in the Options Paper, the submissions received on the Options Paper, and the deliberations of the DRAG, Gas Industry Co will propose in this Statement of Proposal to codify in the Rules all of the exemptions that deal with atypical gas gates.

Those atypical gas gates that have been the subject of long-standing exemptions are: direct connect gas gates, gas gates where the global 1-month methodology has been used, unmetered gas gates, and oversized metered gas gates.

4.1 Direct connect gas gates

Exemptions have previously been sought by participants for direct connect gas gates and for single-retailer gas gates at which there were multiple customers. Gas Industry Co decided to grant an exemption for instances of the former but not the latter. Direct connect gas gates would likely provide a net cost by being covered under the Rules as all gas delivered at those gates would be allocated to a single party, i.e. there is no need to measure and allocate UFG.

For single-retailer gas gates however, the decision not to grant an exemption was on the basis of transparency and competition concerns. Any customer on a single-retailer gas gate is able to switch retailers at any point (subject to any contractual matters). Therefore, the application of the Rules at such gates enables and assists transparency and competition. The concept of a single-retailer gas gate is also a temporary idea – all it would take to reverse this designation is for one customer to switch at the gas gate before the allocation processes in the Rules would need to apply.

Gas Industry Co presented two options for direct connect gas gates in the Options Paper:

- continue to use the exemptions process but grant the exemptions for longer periods so as to minimise the administrative costs of updating exemptions;

- modify the Rules so as to recognise that gas gates meeting certain criteria should not be subject to certain allocation processes.

Given the purpose of the exemptions process is to address unforeseen circumstances and that many of the exemptions have now been in place for several years, Gas Industry Co was, and remains, of the view that they should not be used on an ongoing basis to cover direct connect gas gates. The preference in the Options Paper therefore was to modify the Rules to include direct connect gas gates.

Submissions

All submitters agreed with Gas Industry Co's proposal to codify the existing exemption as a rule for direct connect gas gates. Maui Development Limited (MDL) submitted that its direct connect gas gates should not be (and should never have been) subject to the Rules. In addition, Vector submitted that transmission system owners should no longer be required to provide daily injection data to the allocation agent for direct connect gas gates.

DRAG

The DRAG discussed the issue of direct connect gas gates at its second meeting. The DRAG was asked by Gas Industry Co to consider:

- the definition of a direct connect gas gate;
- the rules which should and should not apply to the parties associated with direct connect gas gates; and
- whether TSOs should be required to provide daily injection data to the allocation agent for direct connect gas gates.

On the definition of direct connect, the DRAG discussed that care would need to be taken to not inadvertently capture single retailer gas gates. If direct connect was defined along the lines of being a gas gate where a single user consumed gas then it might be possible to capture a single retailer gas gate if, for instance, a gas gate supplied a single site (user) but behind that single site was a variety of different customers each served by competing retailers. The DRAG's preference was to make the definition such that a direct connect gas gate would be one where:

> '…the gas quantity is attributable to a single consumer installation.'

This definition side-steps the problem discussed above. A gas gate that supplies a single site but multiple customers would not be captured by the definition as such a gas gate would have more than a single consumer installation. On the other hand it does capture the possibility of a single customer with multiple gas installations, which is the intention of the drafting since allocations would not be required in this instance.

Gas Industry Co provided the DRAG with a draft rule that enables the industry body to determine, following consultation with participants, which gas gates are to be direct connect gas gates. This

removes any risk that participants could take varying interpretations of the direct connect definition, since a gas gate is only a direct connect gas gate if it is determined to be one by the industry body. Gas Industry Co as the industry body would be required to publish this list on its website. Gas gates could be added to or removed from the list from time to time provided participants were consulted. The DRAG agreed with Gas Industry Co's proposed rule, which is reproduced below:

> **25A. Determination of direct connect gas gates**
>
> **25A.1** The **industry body** will, following consultation with **allocation participants**, determine a list of **direct connect gas gates**.
>
> **25A.2** The **industry body** must **publish** the list of all **direct connect gas gates**.
>
> **25A.3** The **industry body** may, following consultation with **allocation participants**, remove **gas gates** from, or add **gas gates** to, the list of **direct connect gas gates** from time to time.

The effect of the proposed rule and definition is that direct connect gas gates would not be 'allocated gas gates' and would, therefore, be excluded from the application of global allocation and any liability for ongoing fees associated with volumes at those gas gates. Retailers and the allocation agent would have no obligations at direct connect gas gates.

The DRAG discussed whether TSOs should still be required to provide daily injection data to the allocation agent for proposed direct connect gas gates. The consensus was this obligation should be dropped as the allocation agent no longer has any need for this information. However, removing the obligation would mean that the industry body no longer has full visibility of the inflows and outflows of gas at each point of the transmission system. Gas Industry Co often uses such information in its policy processes, to report to the Minister, and in its market-monitoring role. Gas Industry Co therefore proposed to the DRAG that removing the obligation for TSOs to provide daily injection data for direct connect gas gates had to be coupled with an obligation to provide the industry body and the allocation agent with access to that injection information in the event that either party requested it. The DRAG agreed that this was an acceptable outcome.

As a result of the proposed direct connect gas gate rule, a consequential rule change is required so that the Rules make a distinction between direct connect gas gates and other gas gates and thereby make participants' responsibilities clear in each case. The consequential rule change is to define an 'allocated gas gate' and to amend references to gas gates in the current rules to allocated gas gates where relevant. The proposed definition for an allocated gas gate is:

> **allocated gas gates** are all gas gates that are not direct connect gas gates.

The amended references to allocated gas gates in the Rules can be seen in the marked up version at Appendix B, broadly matching the rules which were the subject of the direct connect gas gate exemption.

One consequence of the amended references to allocated gas gates is that consumer installations at direct connect gas gates are no longer required to be assigned to allocation groups. Since the allocation group of an ICP is a mandatory field in the gas registry it will be necessary to define a new code to populate this field to identify where the ICP refers to a consumer installation directly connected to the transmission system.

Section 43N analysis

Assessment of benefits and costs

The benefits of codifying a rule for direct connect gas gates as above include:

- maintaining the status quo operation of the Rules with respect to direct connect gas gates whilst removing the regulatory risk and uncertainty associated with time-limited exemptions;
- eliminating the ongoing, periodic costs on the industry body and allocation participants to assess and extend exemptions;
- reducing the compliance burden for retailers and TSOs at direct connect gas gates under the Rules, particularly for MDL who will no longer have to interact with the allocation agent; and
- removing the need for the allocation agent to download and validate injection files for around 40 gas gates and produce (unnecessary) estimates where the files are incomplete.

The costs of codifying a rule for direct connect gas gates include:

- one-off costs for retailers, TSOs, and the allocation agent associated with amending systems and processes to comply with the Rules as proposed (although these should be negligible as the changes simply align the Rules with current practice);
- administrative costs for Gas Industry Co to determine and maintain the list of direct connect gas gates (these costs are expected to be minor as the gas gates currently exempted will form the basis of the new list and the list will be maintained along with the suite of other determinations under the Rules. It is considered unlikely that there would be a significant number of changes over time).

On balance, especially given that many of those costs will reflect what happens in practice under the exemption, Gas Industry Co considers that codifying a rule for direct connect gas gates will provide a net benefit.

Other reasonably practicable options

The exemptions for direct connect gas gates have existed because this issue was not identified before the Rules were made. In order not to delay the transition from the Reconciliation Code to the Rules, the exemptions were granted so as to allow the allocation processes to proceed efficiently at shared gas gates while not imposing unnecessary costs on participants. GIC undertook to review the Rules so

as to correct this and similar issues that had to be addressed by exemptions. There is no non-regulatory alternative available that will remove the need for the direct connect gas gate exemption.

Rules drafting in appendix

The rule changes and associated amendments are included in the marked-up Rules (Appendix B).

Q3: Do you agree with the proposal to codify a rule for direct connect gas gates? Do you agree with the creation of a new rule enabling Gas Industry Co and the allocation agent to access direct connect injection data as requested?

4.2 Global 1-month methodology

The allocation process works by allocating gas gate UFG on a pro-rata basis to retailers trading at that gas gate by multiplying retailer consumption data by either an AUFG factor (for consumption data in allocation groups 1 and 2) or a monthly UFG (MUFG) factor (for the balance of consumption). This is known as the 'global' allocation method. The global method is justified on the basis that TOU-metered sites provide better quality data than non TOU-metered sites at the initial and interim allocation stages. The effect of this algorithm is that TOU sites have their consumption scaled by a fixed AUFG factor for each gas gate and are insulated from swings in UFG from month to month caused by lower quality data estimates for non TOU sites. By contrast, non TOU sites have their consumption scaled by an MUFG factor, which incorporates all residual UFG at a gas gate and which may vary significantly from month to month.

The relevant equations for carrying out TOU allocations (allocation groups 1 & 2) are[3]:

$$AQ_{1\,\&\,2} = A_{UFG} \times CI_{1\,\&\,2}$$

$$A_{UFG} = \frac{\sum EI_A}{\sum CI_A}$$

Where:

AQ is the quantities to be allocated to groups (as specified by subscripts)

CI is the consumption information for relevant allocation groups as submitted by retailers

EI is the energy injected at the gas gate

The relevant equations in performing non-TOU allocations (allocation groups 4 & 6) are:[4]

[3] Sub-scripts used is these equations are 'A' (relevant actual data for the previous 12 month period up to and including February of the previous gas year), 'd' (relevant data for a day), 'M' relevant data for a month).
[4] Allocation groups 3 & 5 are calculated by multiplying consumption by the relevant MUFG factor.

$$AQ_{4\,\&\,6} = \left(M_{UFG} \times \sum CI_{4\,\&\,6}\right) \times \frac{GRP_{d(1,2\ldots final)}}{\sum GRP_{d(1,2\ldots final)}}$$

$$M_{UFG} = \frac{(\sum EI_M - \sum AQ_{1\,\&\,2})}{\sum CI_{3-6}}$$

$$GRP_{d(1,2\ldots final)} = EI_d - AQ_{1,2,3\,\&\,5}$$

Where:

GRP_d is the gas gate residual profile for the gas gate for the day

The method outlined above is central to the global allocation methodology prescribed by the Rules, however for certain gas gates, this methodology produces results which are inconsistent with the purpose of the Rules. If TOU load dominates at the gas gate then any variations in UFG are more likely to be caused by metering inaccuracies between that TOU load and the gas gate meter than the retailers' estimates associated with smaller non TOU load at the gate. Thus, the assumption that a proportionally higher amount of outstanding UFG at the gate ought to be allocated to non TOU customers does not transfer equitably to TOU-dominant gas gates where there are large variances in monthly UFG.

This issue was recognised under the former Reconciliation Code and, for some gas gates, a global 1-month UFG methodology (G1M) was used to allocate gas rather than the prevailing difference method. The key determinant of whether a gas gate was subject to the G1M methodology or the difference method was the proportion of TOU load at the gas gate.

The problem with the global allocation methodology at certain gas gates is not the dominance of TOU load *per se*, nor is it the reliability of the GMS, since the TOU meters and associated loggers, correctors and telemetry are generally reliable and errors are likely to be picked up more quickly than on a non-TOU meter given the frequency of interrogation and scrutiny of a large customer's demand compared to, say, the average household; rather, the issue is that even where a TOU meter is considered to be operating accurately (i.e. within its margin of error), if that customer installation represents a majority of the gate volume, say 90%, then a one to two per cent over or under-read translates to a ten-fold to twenty-fold increase or decrease in the volume of UFG allocated to the non-TOU customers at the gate. A tell-tale sign of TOU-load being the primary causer of UFG at a gas gate is extreme variability in MUFG factors.

The G1M methodology was not carried over into the Rules from the Reconciliation Code, so for the gas gates which exhibit TOU-dominance, parties applied for an exemption that made provision for the alternate algorithm until such time that a review of the Rules could be carried out. The Options Paper discussed removing the exemption and codifying a provision for the G1M methodology in the Rules although the details and form of that rule were not specified.

Submitters generally agreed that the global method did not produce acceptable allocation results at gas gates with a high proportion of TOU load, though Greymouth fairly suggested that the Options Paper lacked an evidential base of the problem.[5]

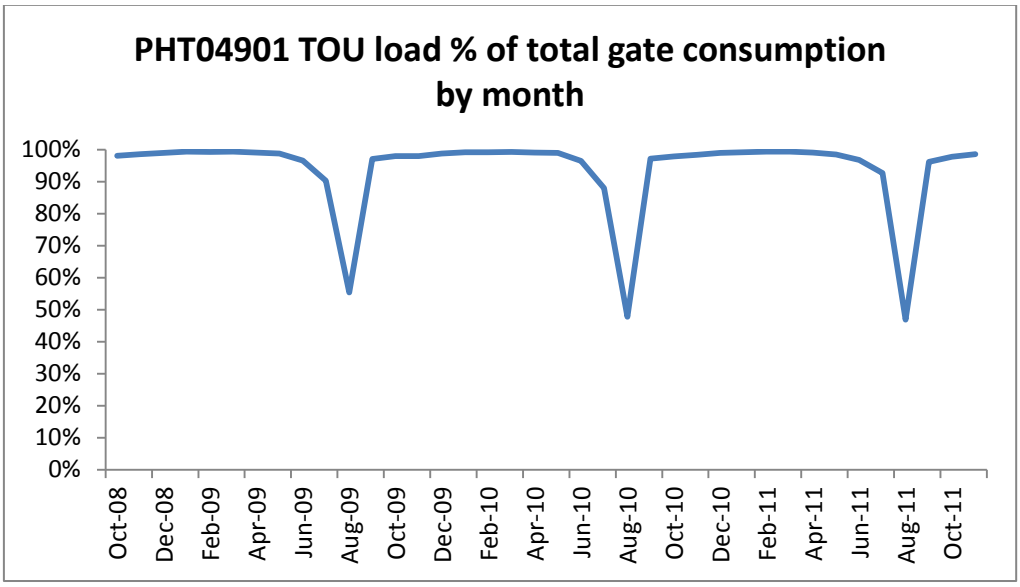
DRAG

The G1M methodology was discussed by the DRAG. Based on the evidence presented at those meetings, together with the experience of DRAG members with the operation of the Rules, it was unanimously agreed that the global methodology does not produce acceptable results at all gas gates and particularly those with a large proportion of TOU load. Based on that conclusion, the DRAG was asked to consider a range of options for specifying the criteria that would determine whether a gas gate was to be a G1M gas gate or if a gas gate would continue to have its allocations carried out according to the global methodology.

The proposed options for specifying the criteria were:

Simple threshold of TOU load at a gas gate

For example, if TOU load at a gas gate was above 80% then the gas gate would be a G1M gas gate. The graph below shows the monthly proportion of TOU load at the Pahiatua gas gate - a gas gate currently subject to the G1M exemption.



Clearly, if a simple threshold criterion of 80% TOU load determined whether the gas gate was a G1M gas gate or not, then for most months Pahiatua would meet that criterion. The additional question is whether the gate's allocation methodology would vary month-to-month as the TOU load varied or whether the methodology used for all allocations was the one for which a majority of the months

[5] Gas Industry Co believes that the analysis presented in section 4.2 of this paper provides an evidential base for the problem. Additional analysis does show the extent of the problem (see for example the DRAG presentations #1 and #2 available here: http://gasindustry.co.nz/work-programme/working-group/downstream-reconciliation-advisory-group). Some of the evidence however cannot be provided publicly as it contains confidential information about the size of retailer's customer installations at specific gas gates.

applied. It was agreed by the DRAG that neither of those outcomes was necessary. A more ideal approach that would provide certainty for relevant participants was to consider the average TOU load over a year and if that 12-month average exceeded a certain threshold then the gas gate would be a G1M gas gate for the following gas year. Table 1 summarises how many gas gates would be captured as G1M gas gates depending on the percentage-TOU threshold selected for the 2010/11 gas year.

Table 1. Number of G1M gas gates as threshold varies

Threshold	Number of G1M gas gates
60%	35
65%	33
70%	32
75%	29
80%	26
85%	23
90%	20
95%	13
99%	6

Cap and floor plus middle ground process

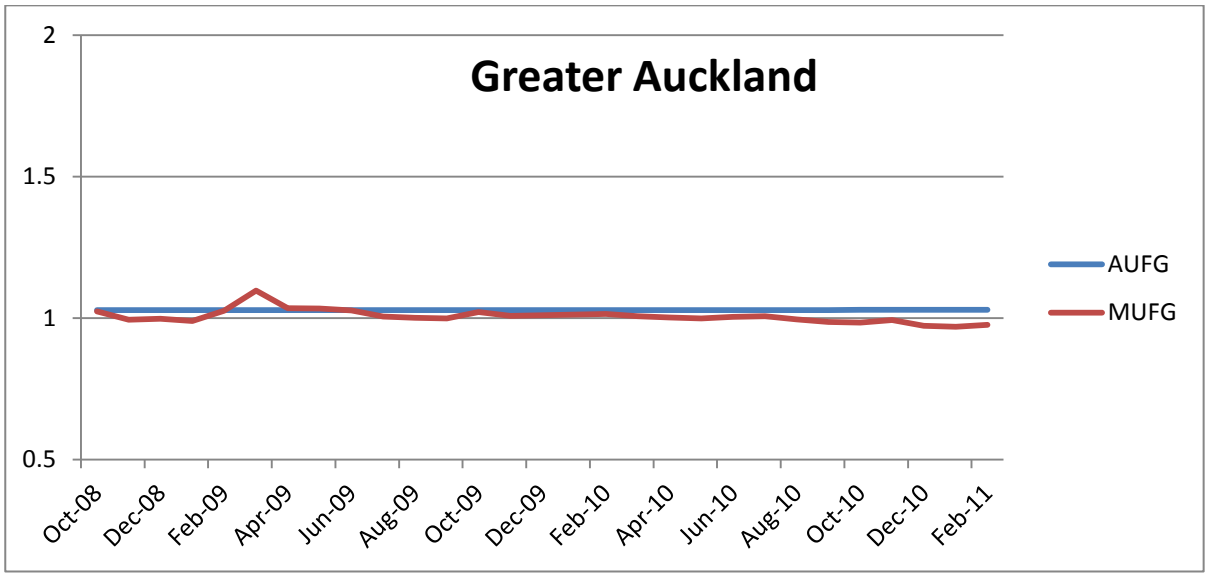
If a gas gate had TOU load in excess of, say, 80% then it would be a G1M gas gate. If a gas gate had TOU load lower than, say, 50% then it would not be a G1M gas gate. For gas gates with TOU load between 50-80% then some additional process would determine whether the gas gate would be a G1M gas gate. For instance, the middle ground criteria could be the extent to which the MUFG factor varies from month to month.

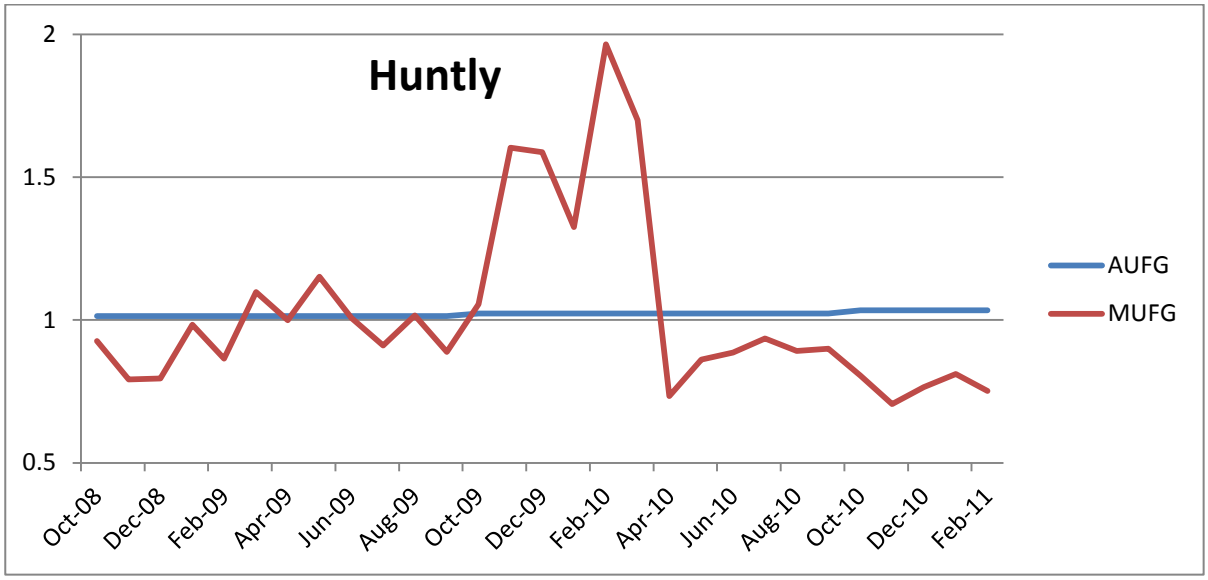
Volatile MUFG variance approach

As discussed above, the presence of significant variability in month-to-month MUFG factors for a gas gate can indicate that a preponderance of TOU load is distorting non-TOU shapes and therefore the allocations for allocation groups 4 and 6 are unlikely to reflect their actual consumption.[6] Compare the two figures below (which use data from the final allocation stage). The first graph of the Greater Auckland gas gate shows the actual variations in AUFG and MUFG factors over the period from October 2008 to February 2011. The Greater Auckland gas gate could be regarded as typical in its mix of TOU and non-TOU loads. The second graph shows the same data but for the Huntly Town gas gate.[7] Unlike the Greater Auckland gas gate, the share of gas at the Huntly gas gate tends to be dominated by TOU customers, i.e. the loads of allocation groups 4 and 6 customers at Huntly have an

[6] Although care needs to be taken to separate out MUFG volatility driven by forward estimation algorithms.
[7] Does not include the Huntly Power Station

insignificant effect on the total gas consumed such that monthly variances in TOU load are likely to be causing the fluctuation in the MUFG factor.





The question for this method then is what degree of variance in the MUFG factor would determine whether a gas gate is a G1M gas gate?

The DRAG discussed each of these options but the discussion quickly turned to combining options one and three. Option two was considered by the DRAG to be too much of an administrative burden, particularly when classifying those gas gates between 50-80% TOU load.

Gas Industry Co agreed with the DRAG that combining options one and three made sense. The problem with selecting either option by itself is that they may not correctly identify the root problem using their relevant method. For instance, just because a gas gate had a TOU load of 85% on average for a year does not mean that the global allocation methodology would necessarily cause problematic

allocation results. However, if that same gas gate displayed a varying MUFG factor (like in the Huntly graph above), then it could be reasonably concluded that indeed the high TOU load was distorting the residual shapes at that gas gate.

Setting the parameters for the proportion of TOU load and MUFG variance, the DRAG agreed, would be unlikely to lend itself to any precise scientific method. This Statement of Proposal suggests that the parameters would be established in a determination published by Gas Industry Co which could be updated from time to time following consultation with industry participants. It is likely that the initial criteria in that determination will be an 80% TOU threshold and the presence of any month-to-month MUFG variance of greater than ±0.1 (equivalent to a ±10% swing in monthly UFG). Gas Industry Co acknowledges that these are subjective figures and it welcomes feedback on a methodology for setting the parameters. The point to note is that those parameters will not form part of a specific rule change, i.e. industry participants will be consulted on them prior to Gas Industry Co's determination coming into effect (and consulted again if there is a proposed change to the parameters in the published determination).

The proposed rule as agreed by the DRAG is reproduced below. The key points to note are:

- as mentioned above, the parameters for determining a G1M gas gate will be set out in a determination published by Gas Industry Co; and
- the allocation agent will determine and publish the G1M gas gates for each gas year by the first business day of July in the previous gas year (using the same dataset as is used to calculate the annual UFG factors).

25C. Determination of G1M gas gates

25C.1 This rule sets out the process for the determination of **G1M gas gates**.

25C.2 The **industry body** must, after consulting with **allocation participants**, determine and **publish** the **G1M criteria**.

25C.3 **G1M gas gates** are those **gas gates** that meet the **G1M criteria** as determined each year in accordance with rule 25C.6

25C.4 In making its determination under rule 25C.2, the **industry body** must have regard to the following matters:

25C.4.1 the extent to which TOU load dominance has created significant variance in the **monthly UFG factor**;

25C.4.2 the extent to which **allocation participants** have been impacted by the variance in the monthly UFG factor;

25C.4.3 the purpose of the **rules**; and

25C.4.4 any other matter it considers relevant to its determination.

25C.5 The **industry body** may redetermine the **G1M criteria**, from time to time, in accordance with rule 25C.4.

25C.6 The **allocation agent** will determine and **publish** the **G1M gas gates** for each **gas year**, by the 1st business day of July in the previous **gas year**.

Effect of implementing the proposed G1M rule

Assuming the parameters of 80% TOU load and a variance in the MUFG factor of ±0.1 for at least one month, Table 2 shows which gas gates would have been G1M contenders in the 2010/11 and 2011/12 gas years.

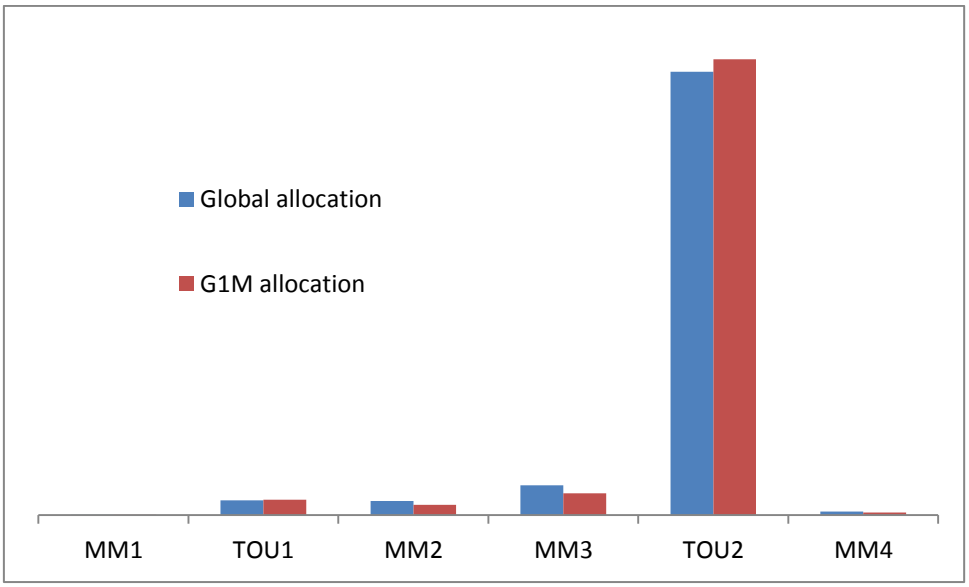
Table 2. G1M gas gate contenders for 2010/11 and 2011/12 gas years

Code	Gas Gate Name	2010/11	2011/12
CAM17201	Cambridge	x	x
DAN05001	Dannevirke	x	x
DRU15102	Drury 2	x	x
EGC30701	Edgecumbe DF	x	x
ELM12301	Eltham	x	x
HAR11801	Harrisville	x	x
HRU16101	Horotiu	x	x
HTL16601	Huntly Town	x	x
HUN15301	Hunua	x	x
KAP12901	Kapuni (Lactose et al)	x	x
KIN02601	Kinleith	x	x
KIW34202	Kiwitahi 2	x	
KKI23701	Kakariki		x
LNB24301	Longburn	x	x
MNA23402	Manaia		x
MTN23801	Marton	x	x
PHT04901	Pahiatua	x	x
PTR32601	Putaruru	x	x
RAM15201	Ramarama	x	x
RPR30801	Reporoa	x	x
TKP05101	Takapau	x	x
TKS17401	Te Kuiti South	x	x
TUK06501	Tuakau	x	x

Code	Gas Gate Name	2010/11	2011/12
WHK32101	Whakatane	x	x
WRK18901	Warkworth	x	x
WTA16501	Waitoa	x	x
WTT20301	Waitotara	x	x
WVY23601	Waverley	x	x

Where "x" denotes G1M gas gate contender

The practical effect of the shift from the global allocation methodology to the G1M methodology is shown in an example below for one of the likely G1M candidates in the table above. The name of the gas gate and names of retailers at the gas gate have been removed to preserve confidentiality.



The key point to note is that under a G1M methodology, TOU-retailers TOU1 and TOU2 are allocated slightly more gas while mass-market retailers MM1, MM2, MM3 and MM4 are allocated less gas than they would be under the global methodology. This is the expected outcome as a result of a move to the G1M methodology – TOU loads will receive a small proportional increase due to monthly UFG and mass market allocations will be reduced by an offsetting volume, but which represents a much higher *proportional* decrease in their allocation of UFG.

In terms of drafting the algorithm, allocations under a G1M methodology would work in much the same way as they do at present. The main difference from the equations set out at the beginning of this section is that instead of scaling consumption data for TOU and non-TOU sites by AUFG and MUFG factors respectively, each G1M gas gate would have a single G1M UFG factor that the allocation agent would use to scale all consumption submissions irrespective of whether they are TOU or non-TOU. The G1M UFG factor would be calculated on a monthly basis ("$_M$") and is given by:

$$G1M_{UFG} = \frac{\sum EI_M}{\sum CI_{M,1-6}}$$

Section 43N analysis

Assessment of benefits and costs

The benefits of codifying a rule for the determination of G1M gas gates and application of the G1M allocation methodology at G1M gas gates include:

- maintaining the status quo operation of the Rules with respect to existing G1M gas gates whilst removing the regulatory risk and uncertainty associated with time-limited exemptions;
- eliminating the ongoing, periodic costs on the industry body and retailers to assess and extend exemptions;
- ensuring downstream allocations are more accurate, efficient and fair at gas gates where the global allocation methodology does not produce acceptable results; and
- providing a dynamic method of determining the gas gates at which the G1M methodology is applied to ensure the best possible alignment with the purpose of the Rules going forward.

The costs of codifying a rule for G1M gas gates include:

- one-off costs for the retailers who are subject to the existing exemption, who must revert back to submitting global 1-month gas gate consumption as AG1 or 2 instead of AG3 (as required by the workaround in the current exemption);[8]
- one-off costs for the allocation agent associated with amending the allocation system to:
    - determine and publish a list of G1M gas gates each year; and
    - apply the G1M methodology to those gas gates on the G1M list

On balance, Gas Industry Co finds that codifying a rule for the G1M methodology will provide a net benefit. Assuming that the one-off costs of codifying the rule are netted off against the benefit of eliminating the ongoing and periodic exemptions process then the real gains from this rule change will be seen from more fair and efficient downstream allocations.

Without a G1M methodology, retailers with mass market customers at some gas gates will be allocated gas volumes that are not reflective of their customers' actual consumption. Anecdotal evidence suggests that the retailers supplying these customer groups have suffered financial harm due to unexpectedly high allocation results causing over-run charges and contributing to shipper mismatch. Given that only three gas gates are subject to the current exemption out of the 26

[8] Note that this will result in retailers applying a standard submission methodology to all gas gates and should reduce the incidence of errors. This makes the dynamic approach to G1M feasible.

identified as fitting the G1M profile, the current framework is not adequately addressing this inequality. The G1M rule change therefore enhances Gas Industry Co's primary objective in the Gas Act.

Other reasonably practicable options

As for the reason mentioned for the proposed direct connect gas gate rule, there is no non-regulatory alternative available that will remove the need for the G1M gas gate exemption. In fact, some industry participants have argued in the past that the G1M method should be used at all gas gates, as it represents a truly 'global' method compared to the current arrangement which allocates a fixed UFG factor to TOU load.

Given that this review of the Rules does not consider the underlying policy settings of the Rules, that suggestion will not be carried further at this point. The 2013 Statement of Proposal, which will consider alternatives to improve the initial allocation, is a more appropriate place to discuss that idea. For example, if it was proposed that a top-down algorithm replace the initial allocation, then it may be reasonable to question whether an AUFG/MUFG split remains appropriate for the interim and final allocations, where meter reads are available for the vast majority of consumers and SADSV are available to create historical estimates.

Rules drafting in appendix

The rule changes and associated amendments are included in the marked-up Rules (Appendix B).

Q4: Do you agree with the proposed rule for G1M gas gates? Do you agree with establishing the deterministic criteria for G1M gas gates in an industry determination?

4.3 Unmetered and oversized metered gas gates

Although the Rules require all gas gates to have meters installed to measure injection quantities, seven gas gates currently do not have any such meters. At present, these gates have an exemption applying to the TSO so that they do not have to submit injection information to the allocation agent. Instead the allocation agent estimates the injection information using the aggregated consumption information submitted by retailers at the unmetered gas gate.

In the Options Paper, Gas Industry Co outlined three options for the ongoing treatment of these unmetered gas gates. The three options were:

- to maintain the status quo;
- to require that meters be installed at unmetered gas gates; or
- to incorporate a materiality threshold, above which a meter must be installed at the gate.

Gas Industry Co's preference was for option two, i.e. to require those seven gas gates to have meters installed, on the basis that accurate measurement of gas flow into a network is central to the reconciliation process and to the purpose of the Rules.

In addition, two gas gates are currently exempted from the Rules because the meters installed are 'oversized', that is, they are too large to accurately measure the current flow of gas into the network. As is the case for unmetered gas gates, the TSO is exempted from supplying injection information and the allocation agent uses the sum of consumption information at downstream sites to estimate the relevant injection quantities.

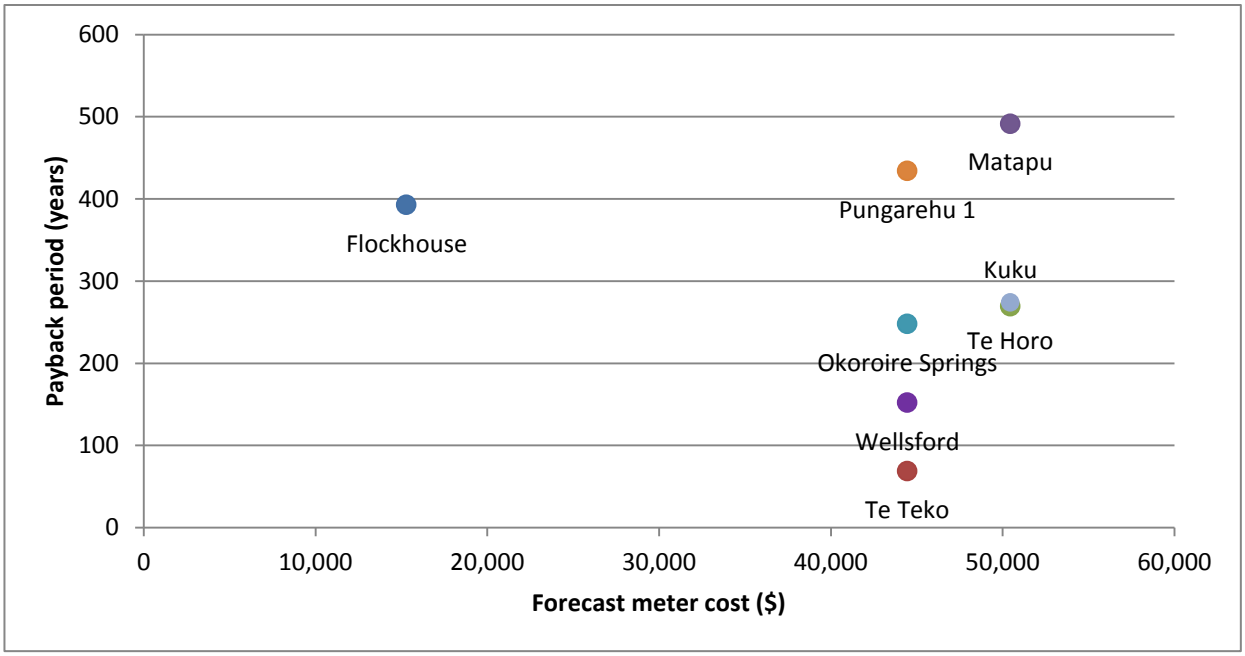
The Options Paper proposed to treat oversized metered gas gates in the same manner as unmetered gas gates. Given Gas Industry Co's preference for all gas gates to be metered, the effect would be to have appropriate replacement meters installed at the Flockhouse and Te Teko gas gates (the two current oversized metered sites).

Submissions on the Options Paper supported treating unmetered and oversized metered gas gates consistently for the purposes of the review. However, submitters were divided on their preferred option for handling these gas gates on an ongoing basis. There was a mixture of support for two options: requiring all gas gates to be metered; and requiring gas gates to be metered provided that it was economic to do so.

DRAG

Gas Industry Co asked the DRAG to consider this issue. To aid the discussion, Vector provided the DRAG with a short presentation on the likely payback period for installing meters at the gas gates, based on the cost of meter installation versus the estimated cost of an (assumed) average level of UFG that is currently unidentified and not allocated.

The shortest payback period would be over 70 years to change the Te Teko (oversized) meter to an appropriately sized meter. Based on the evidence provided, the DRAG agreed that it ought to be unnecessary for all gas gates to be metered if it is inefficient (in economic terms) to do so. This argument seems to hold for all those gas gates that are unmetered or oversized metered at present.



Source: Vector Limited

Gas Industry Co analysis

Gas Industry Co would prefer that all gas gates were appropriately metered. Measured and accurate gas gate quantities are an integral part of the working and purpose of the Rules. Having said that, and despite it being inconsistent with the current wording of the Rules, it is difficult to argue against Vector's point (supported by the DRAG) that the cost of installing meters at the unmetered and oversized metered gas gates would be an imposition of costs on Vector with little or negligible benefit to allocation participants.

In the Commerce Commission's development of the Input Methodologies that are to apply to gas transmission providers, it is noted that a standard physical asset life for a meter varies by that meter's flow rate but is generally between 15-25 years.[9] According to Vector's DRAG presentation, the shortest payback period required for meter installation exceeds this expected asset life by three or four times. Gas Industry Co has therefore worked with the DRAG to draft a new rule that codifies the current exemptions for unmetered and oversized gas gates.

A new rule will give Gas Industry Co the discretion (having regard to certain matters) to determine a list of specific gas gates for which TSOs need not comply with the requirements in rule 41. Although it will be possible to update the list, Gas Industry Co expects the number of gas gates on the list to be either static or to trend down over time. TSOs have a contractual and regulatory requirement to manage and quantify the gas delivered out of their transmission systems so are adequately incentivised to ensure any newly commissioned gas gates are correctly metered. Further, Gas Industry Co would be unwilling to accept that existing metered gas gates should be added to the list in future

[9] Commerce Commission (2010), 'Commerce Act Gas Transmission Services Input Methodologies Determination December 2010', from http://www.comcom.govt.nz/gas-pipelines-2/, accessed 11/05/2012, Schedule A

if, in the event of meters requiring replacement, a TSO decided that it would forego that cost by not re-installing a meter.

In addition to the proposed rule described above, new rules will also be required to enable the allocation agent to produce estimated injection quantities for those unmetered or oversized metered gas gates on the list. The proposed rules, drafted with assistance from the DRAG, are reproduced below.

Definitions

oversized metered gas gates are those gas gates as determined by the industry body in accordance with rule 25B, where the volume of gas delivered at the gas gate is below the minimum flow rate of the gas gate meter

unmetered gas gates are those gas gates determined by the industry body in accordance with rule 25B

Rules

25B. Determination of unmetered and oversized metered gas gates

25B.1 The **industry body** will, following consultation with **allocation participants**, determine a list of **unmetered gas gates** and **oversized metered gas gates**.

25B.2 In making its determination, the **industry body** must have regard to the following matters:

25B.2.1 the extent to which **allocation participants** have been impacted by the inability to measure injection quantities at the **gas gate**; and

25B.2.2 any costs associated with the installation of a meter that will accurately measure the quantities of gas delivered at the **gas gate**; and

25B.2.3 the likely benefits resulting from the accurate measurement of gas quantities at the **gas gate**; and

25B.2.4 the purpose of the **rules**; and

25B.2.5 any other matter it considers relevant to its determination.

25B.3 The **industry body** must **publish** the list of **unmetered gas gates** and **oversized metered gas gates**.

25B.4 The **industry body** may, following consultation with **allocation participants**, remove **gas gates** from, or add **gas gates** to, the list from time to time.

43. Allocation agent to use estimates

43.1 For the purpose of performing allocations under these **rules**, the **allocation agent** must estimate:

[…]

43.1.3 The **daily metered energy quantities** for **unmetered gas gates** and **oversized metered gas gates** in accordance with the following formula:

$$\mathrm{EEI_d} = \mathrm{CI_{1-3,5,d}} + \frac{\mathrm{CI_{4,6}}}{\sum \mathrm{d}}$$

Where:

EEI_d is the estimated daily energy injection quantity in GJ for the day

$CI_{1\text{-}3,5,d}$ is the consumption information for allocation groups 1 to 3 and 5 for the day

$CI_{4,6}$ is the consumption information for allocation groups 4 and 6 for the consumption period

$\sum d$ is the total number of days in the consumption period

Section 43(N) analysis

Assessment of benefits and costs

In its presentation to the DRAG, Vector asserted that any UFG at unmetered or oversized metered gas gates) is borne by Vector Transmission and is not passed on to shippers/retailers. According to Vector, the beneficiaries of correctly metering these gas gates are unknown – Vector or retailers could be the beneficiary depending on the accuracy of retailer consumption data.

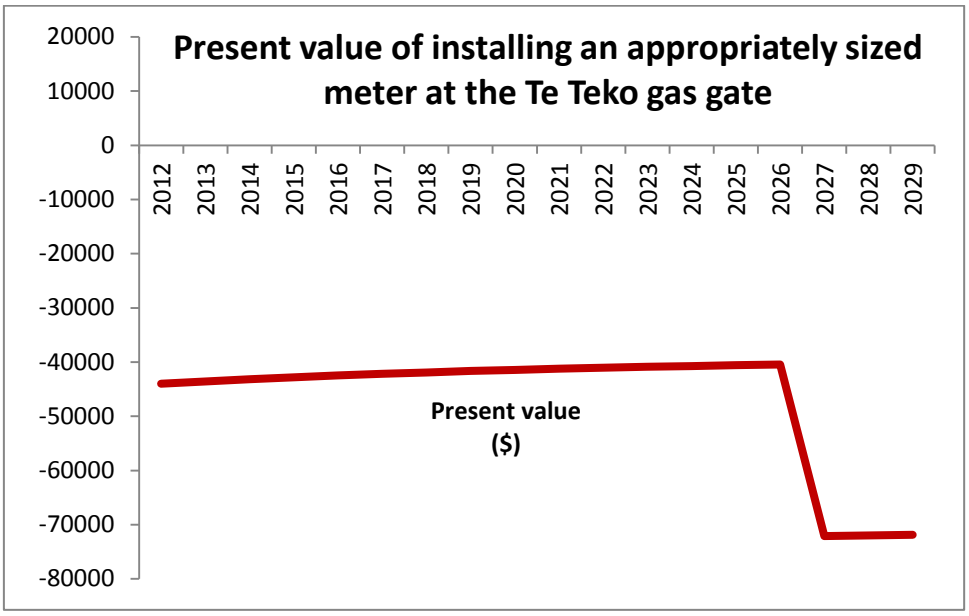
Gas Industry Co notes that while the beneficiaries of having appropriate metering systems installed at gas gates may not be clear in all circumstances, the ultimate test is whether there is an efficiency improvement to having meters installed at unmetered/oversized metered gas gates. A further benefit is the transparency of data at all gas gates which enhances the overall accuracy of the downstream reconciliation system by ensuring that gas is allocated to those parties responsible for consuming it. The Rules are clear on this – the efficiency and accuracy of the system may only be maintained and enhanced by having meters installed at all gas gates. Thus, who benefits from having metered gas gates is secondary to the purpose of the Rules.

Having said that, given that the existing unmetered/oversized metered gas gates make up such a small amount of annual throughput (Vector otherwise meters 99.98% of throughput) and that there is a risk these gas gates would simply be decommissioned in favour of installing an appropriate meter, the relevant cost-benefit threshold for this decision is to weigh up the cost of installing appropriate sized meters with the benefit of reducing any UFG and ensuring that UFG is allocated efficiently.

While Vector's payback period graph above is not displayed in present values, Gas Industry Co finds, using a simple cost-benefit analysis, requiring an appropriately sized meter to be installed at Te Teko would have a negative net present value.[10] Even at a relatively high rate of annual UFG (3%) the required installation would come at a significant commercial loss to Vector. Assuming the Te Teko gas gate does not change its flow rate in future and that a new meter would be required to be installed

[10] Assuming annual offtake of 2262GJ, UFG cost of $7/GJ, UFG at 3% per annum, meter cost of $44,000 and a WACC of 7.04%

15 years after the first meter, the NPV deteriorates significantly once the second meter has to be installed. While this analysis does not factor in additional efficiency benefits and despite those efficiency gains being difficult to quantify, it is unlikely that they would be of sufficient magnitude to reverse the outcome of the analysis.[11]



Other reasonably practicable options

For the previous reasons given for the atypical gas gates, there is no non-regulatory alternative available that will remove the need for the unmetered and oversized metered gas gate exemptions. It is of course possible to allow the current exemptions to lapse without changing the Rules, in which case the TSO's non-compliance with rule 41 would be settled via the arrangements in the Gas Governance (Compliance) Regulations 2008. Whilst this process could result in a number of possible outcomes, Gas Industry Co finds it difficult to imagine that the investigator or Rulings Panel could take a view which is inconsistent with the economic arguments set out above and would be likely to recommend that the Rules be amended, or an exemption granted, so as to resolve the issue.

The other option would be to continually grant ongoing exemptions for certain gas gates however, as per the previous sections, there is an associated administrative cost involved with this option as well as the regulatory uncertainty for participants and the risk to Gas Industry Co of promoting a de-facto rule change via the exemption provisions.

In its proposal, Gas Industry Co is codifying the exemption whilst retaining the discretion to classify unmetered/oversized gas gates as and when conditions change at those gas gates. Codifying the exemptions maintains the benefit of the exemptions whilst removing the uncertainty and the need to maintain that process.

[11] The efficiency gains required would have to be at least to the value of the total gas consumed at Te Teko on an annual basis.

Rules drafting in appendix

The rule changes and associated amendments are included in the marked-up Rules (Appendix B).

Q5: Do you agree with the proposed rule change for unmetered and oversized metered gas gates?

5 Apportionment of ongoing fees

Ongoing fees are recovered from retailers to meet the ongoing allocation costs which comprise the allocation agent business-as-usual costs plus any external advice and/or system development costs. The estimated ongoing allocation costs are $700,000 for the current gas year. The costs are apportioned to retailers based on their monthly share of the total volume of allocated gas as determined by the initial allocation results published in the month before the invoice month. The outcome of that arrangement is that a retailer with a small number of large industrial customers will likely pay more of the ongoing fees than a retailer with a large number of mass market customers.

When the Rules were being developed there was considerable debate around whether the ongoing fees would be based on market share by allocated volumes or by number of ICPs. It was decided at the time that apportionment by volume would be the best arrangement. At the same time, the Gas (Switching Arrangements) Rules 2008 were drafted on the basis that the development and ongoing costs of the gas registry would be based on the number of ICPs. These arrangements mirror the approach taken in the New Zealand electricity market.

Options Paper

The Options Paper discussed a request that had been received to review the allocation of ongoing costs for the gas allocation system. Gas Industry Co proposed in the Options Paper, given the lack of compelling evidence in favour of either approach, that a move to a 50:50 split between volumes and ICPs seemed a reasonable compromise.

In submissions on the Options Paper the majority of submitters disagreed that there needed to be a change to the apportionment of ongoing fees. Arguments were that:

- there had not been a clear case for changing from the status quo;
- changing from the status quo would create an unnecessary difference between arrangements in electricity and gas markets;
- allocation costs are driven by gas volumes so costs should be apportioned on the same basis; and
- if there was a change to a 50:50 arrangement then other market fees overseen by Gas Industry Co should also be changed to be consistent.

Vector, whose subsidiary OnGas operates in the TOU segment of the market, did not agree that the status quo was efficient or fair and instead suggested that the ongoing fees be based purely on number of ICPs. Their rationale was that mass market retailers drive the costs of the reconciliation system, particularly as they require more than one allocation stage (and often more than two) due to infrequent meter readings. Vector suggests that high-volume customers (with time-of-use metering) on the other hand often require only one allocation stage because their consumption is logged daily and there is no need for the estimation techniques that non-TOU customers require.

Of course mass market retailers are quick to point out that TOU meters and telemetry systems are not 100% reliable and that, due to a level of magnitude difference in scale, an error at a TOU-metered site is likely to have a much greater impact than a metering error at a non TOU-metered site.

DRAG

The DRAG was asked by Gas Industry Co to consider whether there was any criteria or analysis they considered would provide any guidance for making a decision on whether (and how) to change the current apportionment of ongoing costs. Ultimately, there were arguments for and against each of the apportionment options but no evidence to justify a change from the status quo. The DRAG considered that there could be merit in Gas Industry Co approaching the allocation agent to check exactly how the allocation agent's costs were derived. The allocation agent's annual fee is made up of components including operation of the allocation system, IT support, contribution to overheads, disaster recovery and a range of other items.

Discussion with the allocation agent has indicated that a large proportion of its costs are fixed. The balance of the cost seems to be more affected by the number of retailers than either volumes or numbers of ICPs. Given that the allocation system was built to support three allocations per consumption period, there is little correlation between ongoing costs and numbers of allocations.

Gas Industry Co analysis

Gas Industry Co proposes that there be no change to the way ongoing fees are apportioned for the following reasons.

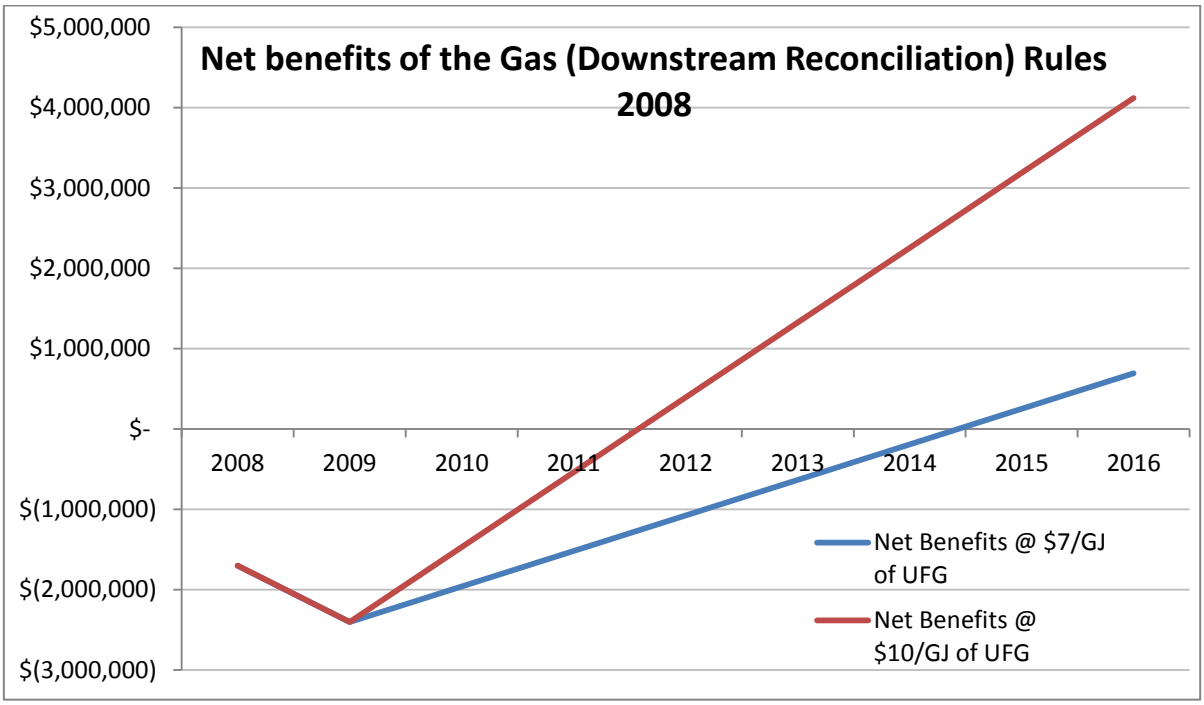
Because there is not a linkage between either ICPs or allocated volumes and allocation agent costs, Gas Industry Co considered the benefits of the Reconciliation Rules. All of the performance and event audits carried out under the Rules so far have identified issues that, upon being resolved, have resulted in a decrease in UFG at the relevant gas gates. The benefits of this process accrue to all reconciliation participants *pro rata* with their allocated volumes. Thus, the benefits of the Rules are realised in relation to allocated volumes, rather than numbers of customers (ICPs).

For example, the introduction of the Rules allowed Gas Industry Co to identify that the E-Gas Group of Companies was under-submitting in winter months, thereby creating UFG that was borne by all retailers. Once that issue was identified and eliminated, the benefits of that decreased UFG amounted

to an ongoing stream of approximately 250 TJ per annum that would filter through to reconciliation participants in the following ways:

- TOU retailers would benefit from a reduction in annual UFG factors for all subsequent years;
- mass-market retailers would benefit from a decrease in MUFG factors during the winter months.

The graph below shows the net benefits of the Rules to the industry on a volume basis since the Rules went live in 2008. The sunk establishment cost of $1,000,000 is included along with the $700,000 annual fee. The benefits of the Rules are in the form of annual avoided UFG that has resulted directly from audits made under the Rules. The graph shows that on a volume basis, the current stream of benefits has or will (depending on the cost of UFG) provide an increasing net benefit to the industry. Of course, the net benefit lines would increase faster if additional UFG is uncovered and reduced. As stated above, these ongoing net benefits accrue to reconciliation participants on a *pro rata* basis with their allocated volumes.



This policy review has not sought to address the question of who are the principal causers of UFG, but if the Rules were reviewed again in the future then this issue could be considered further. Whilst it is generally acknowledged that infrequent mass-market meter reading is a cause of UFG (positive or negative) at the initial allocation, that issue is corrected at the interim and final stages as more metering data is obtained and SADSV become available to create historic estimates. The global allocation methodology insulates allocations to TOU sites from this data variability by virtue of setting a fixed allocation (AUFG) for TOU sites at each gas gate for each gas year.

Because of the volumes of UFG identified and eliminated as a result of introducing the Rules, the benefits have exceeded, and will continue to exceed, the costs. Gas Industry Co finds that there is no compelling evidence to suggest that a change to the apportionment of ongoing fees is necessary.

A related issue is discussed in Section 10.3 where it is suggested that the DRAG considers including in the next Statement of Proposal a provision to apportion certain development costs arising from changes to the Rules to specific participants.

Q6:	*Do you have any comment on Gas Industry Co's recommendation not to change the method of apportioning the ongoing fees?*

6 Correcting AUFG factors

The annual UFG (AUFG) factor, as calculated according to rule 46.3.1, is used to allocate quantities of gas to ICPs in allocation groups 1 and 2 at each gas gate. The Rules were originally drafted on the basis that more reliable consumption information could be expected from allocation groups 1 and 2 than from allocation groups 3 to 6. The outcome of that assumption is that allocation groups 3 to 6 bear the cost of any errors due to TOU meter issues or metering inaccuracies (to the extent that these are not discovered) because of the way monthly UFG factors are calculated.

The allocation agent is responsible for the determination and publication of the AUFG factors applicable to each gas gate. The AUFG factors are published by 1 July each year and take effect from 1 October. The calculation period for the AUFG factors spans the 12 months from March in the previous year to February in the current year which, at the point of calculation, entails the use of submission data from three final allocations and nine interim allocations.

There have been at least two instances where the data used to calculate the AUFG factor for a gas gate have been found to be erroneous subsequent to the publication of the AUFG factors. As the Rules contain no provision for the correction of published AUFG factors, in the first case the issue was dealt with via the compliance arrangements and in the second an exemption was granted to the allocation agent that allowed the necessary correction to be published and used.

There is now an opportunity to create a specific rule enabling the correction of AUFG factors and this suggestion was advanced in the Options Paper. Most submitters agreed with Gas Industry Co's proposal to create a specific rule enabling the correction of AUFG factors. Whilst agreeing that corrections occasionally needed to happen, Contact and Greymouth did not support the proposal, instead favouring the use of the exemptions process.

The problem with relying on the exemptions process is that it provides no clarity or certainty to allocation participants, including the allocation agent, as to when and under what circumstances an AUFG factor would be corrected if it is found to be erroneous. In the instance where an exemption was used previously, it was close to the start of the gas year, the error only impacted a single gas gate and the correction resulted in a significant change to the AUFG factor. It was therefore evident that the benefits of granting an exemption outweighed the costs of departure from the status quo. If there had been no exceptional circumstance but an AUFG factor error had been found, there is no certainty in the current rules that this error would be corrected.

DRAG

The DRAG agreed that a specific rule enabling the correction of AUFG factors would provide certainty of process. Discussion points on what a specific AUFG factor rule could look like included the following:

Problems with re-opening AUFG factors

DRAG members noted that correcting AUFG factors regularly would impose costs on all industry participants because billing and invoices would have already been sent based on the uncorrected factors. Thus, there ought to be magnitude and materiality aspects to any new rule. If an AUFG factor was found to be erroneous, the error would need to exceed some threshold before it would actually be corrected.

Also discussed was the preference for a limit on how far back a correction could be applied. It was suggested that if an error is discovered affecting an AUFG factor for a gas year where the final allocations have been conducted for all consumption periods then it may be more burdensome to re-open calculations than to use alternative means to remedy the error. Where such an error is associated with a breach of the Rules then the compliance regime can be (and has been) used to provide redress without the need to republish allocations.

Alignment with special allocation process

In the discussion of the above issues with the DRAG, it was suggested that the existing special allocation rule (rule 51) provided a useful framework for considering how a decision to correct an AUFG factor could be made. Special allocation decisions involve stakeholder consultation and the evaluation of evidence against certain criteria, which are further specified in a guideline. It was proposed that if a rule is created to correct AUFG factors it could mirror rule 51 in these aspects.

It was also suggested that such a rule should align with the time constraints in rule 51 ('up to 12-months after a final allocation has been performed'); however, the drafting of rule 51 allows the industry body to determine any specific procedures that may apply to a special allocation, which could presumably include the correction of an AUFG factor. So, while the new rule enabling the correction of AUFG factors would be limited to a correction period of 15 months after the relevant AUFG was published, the special allocation rule would be amended to clarify that it would not be limited by anything in the new rules.

Thresholds

It was agreed by the DRAG that a reasonable starting point for the two relevant thresholds in determining whether an AUFG factor was to be corrected ought to be:

- a change in the magnitude of the AUFG factor in the order of 0.01 (for example a change from 1.035 to 1.025); and/or

- that a material movement of 1000GJ between TOU and non-TOU allocations in any one month would result after making an AUFG correction.

These thresholds aim to ensure that only material AUFG factor errors may be corrected.

Determination

Rather than including the thresholds in a new rule, the DRAG agreed that it would be better to allow for the correction of AUFG factors in the new rule but to give Gas Industry Co the ability to determine the thresholds. The benefit of this arrangement is that, should the AUFG factor thresholds require updating in future, on the basis that they are found to be too stringent, too lax, or inappropriate for the decision, Gas Industry Co could consult on the determination and have a change quickly in place.

Best available data

Further clarification of the proposed provision was discussed. It was agreed that if a correction to an AUFG factor is to be made then it will be calculated using the most recent data uploaded to the allocation system, rather than the numbers used for the original calculation with only the incorrect submissions altered. It was also agreed that all gas gates would be included in any republished AUFG factor report (GAR090) so that if retailer systems are updated automatically by such reports then the possible situation of AUFG factors for other gas gates being zeroed out would be avoided. The gas gates unaffected by the error would not be recalculated.

Rule drafting

Based on the discussion points above, Gas Industry Co worked with the DRAG to formulate the following rule change, which is included as part of this Statement of Proposal. Assuming this rule change becomes effective, a determination will be made shortly after the date of effect. The determination is likely to include those two thresholds mentioned above.

46A. Correction of an annual UFG factor

46A.1 The **industry body** may require the **allocation agent** to correct and republish an **annual UFG factor** up to 15 months after an **annual UFG factor** has been determined and published in accordance with rule 46.4.

46A.2 Before the **industry body** makes a request for the correction of the **annual UFG factor**, the **industry body** must be of the opinion that the current **annual UFG factor** may have, or had, a sufficiently unfair impact on **allocation results** at the **allocated gas gate** to which the **annual UFG factor** applies.

46A.3 If the **annual UFG factor** is corrected in accordance with this rule

46A.3.1 the correction of the **annual UFG factor** must be calculated in accordance with rule 46.3.1;

46A.3.2 the **allocation agent** must **publish** the corrected **annual UFG factor** and replace the **annual UFG factor** published under rule 46.4.2 and include a notation that the **annual UFG factor** has been recalculated;

46A.3.3 when publishing under 47.3.2, the **allocation agent** must republish (but not re-calculate) the **annual UFG factor** for all other **allocated gas gates**;

46A.3.4 the corrected **annual UFG factor** will apply to all allocations performed after the date that the corrected **annual UFG factor** is published.

46A.4 Notwithstanding this Rule, the **industry body** may determine any specific procedures that will apply to the correction of an **annual UFG factor**.

Section 43(N) analysis

Assessment of benefits and costs

The main benefit of codifying a rule enabling the correction of AUFG factors is that erroneous factors may be corrected, ensuring that allocations will be more accurate than if the AUFG factor(s) were not corrected. The use of incorrect AUFG factors does not just influence the accuracy of TOU allocations. Because of the way the MUFG factor is calculated, mass market allocations will also be distorted by incorrect AUFG factors, as the following example shows for one hypothetical month.

Table 3. Example of how incorrect AUFG factors influence allocations

	-0.01	Actual	0.01
AUFG factor	1.01	1.02	1.03
MUFG factor	1.04896	1.033	1.017
Injection	1000	1000	1000
TOU consumption			
Retailer 1	500	500	500
Retailer 2	100	100	100
Mass market consumption			
Retailer 1	0	0	0
Retailer 2	375.61	375.61	375.61

Allocation results				
Corrected (-0.01)				
	TOU	Mass market	Total	Change
Retailer 1	505	0	505	-5
Retailer 2	101	394	495	5
Actual				
	TOU	Mass market	Total	Change
Retailer 1	510	0	510	
Retailer 2	102	388	490	
Corrected +(0.01)				
	TOU	Mass market	Total	
Retailer 1	515	0	515	**5**
Retailer 2	103	382	485	**-5**

Table 3 shows the expected variance in allocations from two scenarios that deviate from a base scenario ('actual'). The base scenario has an AUFG factor of 1.02. Assuming that the correct AUFG factor was 0.01 in either direction of the actual AUFG factor and holding all other parameters constant in the scenarios, the allocation for both retailers differs as the MUFG factor also varies.

The costs of codifying a rule enabling correction of AUFG factors include:

- negligible sunk costs in drafting the rule;
- administrative costs to the allocation agent of having to republish AUFG factors when necessary; and
- inconvenience costs to retailers if and when AUFG factors are republished.

On balance, Gas Industry Co finds that codifying a rule enabling the correction of AUFG factors will provide a net benefit. The costs are administrative in nature and negligible in any event. The cost to the allocation agent is likely to be minimal since the process already exists in the allocation system to create the GAR090 report and this can be executed at any time. These costs are significantly outweighed by the benefits that would accrue to parties from having correct AUFG factors in the form of equality gains.

Other reasonably practicable means

As discussed above, the correction of AUFG factors could be done using the exemptions process. However, Gas Industry Co considers that it would be inappropriate to rely on the exemptions for a longer period of time, particularly given that they were initially intended to smooth over any transitional problems as the Rules were implemented. Codifying the rule above provides clarity and certainty about what will happen in the event that an error in the calculation of an AUFG factor is discovered.

Rules drafting in appendix

The rule changes and associated amendments are included in the marked-up Rules (Appendix B).

Q7: Do you agree with the proposed rule enabling the correction, where necessary, of an AUFG factor if it is found to be incorrect?

7 Compliance related issues

7.1 Estimated daily energy quantities

The Rules require that retailers provide to the allocation agent 'actual daily energy quantities' for each consumer installation in allocation groups 1 & 2. If for any reason a retailer is unable to provide actual data, up to three breach notices can be alleged by the allocation agent (one for each allocation stage). The Rules also require that retailers provide their best estimate of consumption information if they cannot provide actual TOU data, but this is not deemed to represent compliance with the obligation to provide actual data.

There is a similar requirement on TSOs to provide to the allocation agent 'actual daily energy quantities' injected at each gas gate, however there is no rule allowing a TSO estimate to replace actual data for injection information (the obligation to estimate lies with the allocation agent). Hence a TSO is also at risk of three alleged breaches if it is unable to provide actual data. This issue was not raised in the Options paper but it seems appropriate that any proposed change to deal with estimated daily energy quantities reported by retailers should also address injection quantities reported by TSOs.

The present favoured status of UFG allocation to allocation groups 1 & 2 was based on the premise that the data is logged on a daily basis and is, therefore, immune to the accuracy and reliability issues that affect data estimates for other allocation groups and this seems less justifiable if estimated TOU data is being provided for an allocation. On the other hand, Gas Industry Co understands that it is unreasonable to expect that TOU meters will operate accurately and effectively 100% of the time. Participants were asked in the Options Paper which of four options they favoured to address missing or estimated TOU data:

- eliminate the triple jeopardy; or
- provide a floor for estimated data; or
- apply a MUFG factor to estimated data; or
- permit TOU estimates in some circumstances provided an appropriate estimation methodology is used.

The majority of submitters were in favour of creating a new rule for dealing with estimated TOU data with most support for options one or four above. Contact Energy made an alternative suggestion which builds on the fourth option. Contact's preference was:

- if a retailer was unable to provide actual daily consumption information for a TOU-site then it must provide an estimated figure and flag to the allocation agent that it was an estimate;
- the above would not constitute a breach in itself;
- if, by the time that final allocations were made, the retailer was still unable to provide an actual figure then the estimated consumption would be deemed a permanent estimate;
- when performance audits are carried out, the auditor would examine the methodology used by the retailer to provide TOU estimates. If the auditor was not satisfied that the methodology used was appropriate, then a breach would be notified to the retailer; and
- settlement of the breach should be subject to the retailer demonstrating that it has implemented system and/or process improvements to its TOU customer consumption methodology.

DRAG

It was agreed by the DRAG that providing estimates for TOU consumption ought to not be a problem in itself. The problem, and therefore the grounds for alleging a breach, should be related to not using a satisfactory methodology to calculate any estimate. The DRAG agreed that Contact's suggested approach above was the most sensible solution.

It was also agreed that there was additional uncertainty created by the use of the word 'actual' in the Rules in relation to daily energy quantities. Differing interpretations of the word 'actual' have recently been the subject of a compliance action and, as part of the settlement, an exemption was required to provide clarification on the obligation of TSOs with respect to rule 41 and the status of corrections made in accordance with the VTC.

One member of the DRAG was able to provide an insight into the intention of the original drafters of the Rules. The references to 'actual' with respect to daily energy quantities were to distinguish this category of consumer installation where a meter logs daily data (that is, allocation groups 1 and 2) from installations where the daily energy quantities were derived or profiled in some way. According to the DRAG member, it was never the intention to forbid the use of estimation.

The agreed way forward was to combine Contact's suggested methodology and to resolve the problems created by the use of the word 'actual' by removing this reference throughout the Rules and introduce a new definition for 'daily metered energy quantities' as follows:

> **daily metered energy quantities** are quantities derived from gas measurement systems with a datalogger or corrector fitted that records daily information. If no reliable data is available, energy

quantities will be determined in accordance with the responsible allocation participant's best estimate consistent with Schedule 1.

This definition allows for estimated data where a meter reading is unavailable or unreliable, but places an obligation on the allocation participant to provide a best estimate. It is against this obligation that participants can be audited to ensure that their estimation methodology is reasonable.

Creating this definition makes rule 44.5 redundant but for the requirement on retailers to flag estimates to the allocation agent. This requirement will be retained with the rest of the rule deleted. The DRAG discussed whether an equivalent obligation to flag estimates or corrections ought to be placed on the transmission system owner, but it was agreed that sufficient transparency of correction volumes and processes already exists within OATIS.

Section 43(N) analysis

Assessment of benefits and costs

The benefits of implementing the above rule change include:

- eliminating the significant administration costs for the allocation agent, the market administrator and allocation participants associated with alleged breaches of rules 31 to 33 and 41 (approximately 20 per month) which, in 99.5% of cases, have not raised a material issue;
- for TSOs, providing a process which is consistent—rather than in conflict—with their contractual arrangements; and
- providing for a consistent, auditable process for deriving estimates, which will likely have a higher degree of accuracy than an estimate produced by the allocation agent.

The costs of implementing the rule change include:

- negligible sunk costs in drafting the rule;
- any one-off system or process changes required by the allocation agent, TSO, or retailers to give effect to the rule which are unlikely to be significant.

On balance, Gas Industry Co finds that the benefits of this rule change outweigh its costs.

Other reasonably practicable options

Given the desire to tidy up identified issues with the Rules and to remove the reliance on the exemptions process, maintaining the status quo is not a reasonably practicable option for dealing with estimated TOU data.

Rules drafting in appendix

The rule changes and associated amendments are included in the marked-up Rules (Appendix B).

Q8: Do you agree with the proposal for dealing with estimated daily energy quantities?

7.2 Trading Notifications

The allocation agent often alleges breaches of rule 39 which requires retailers to notify the allocation agent whenever they:

- commence supplying gas to a consumer installation at a gas gate at which it has not previously supplied gas; or
- cease supplying gas to any consumer installations at a gas gate; or
- commence or cease a transmission services agreement (TSA) with a TSO in respect of gas supplied at a gas gate.

The deadline for providing these trading notifications is midday on the third business day of the month following the consumption period in which the change takes place. The deadline is chosen specifically so that when the allocation agent performs the initial allocation, between the fourth and fifth business days, the allocation system contains up-to-date information of which retailers are trading at which gas gates and under which TSAs the allocated volumes should be reconciled. The allocation system uses trading notifications for:

- validation checks when allocation participants upload submission files to the allocation system;
- completeness checks, that is, checking for missing submissions and identifying the retailer responsible where submissions are missing so that they can be contacted if time permits;
- estimating and allocating volumes where missing or incomplete submissions cannot be corrected before the required deadline for publishing the allocation;
- allocating volumes where injection is positive but there is zero consumption information; and
- identifying the shipper ID and TSA contract ID against which the daily allocated volumes at each gas gate and for each retailer should be reported.

Options Paper

Gas Industry Co asked participants in the Options Paper about the cause of the rule 39 breaches and whether there were any suggested remedies for alleviating them.

Submitters indicated that the most common reason for late trading notifications occurring was due to back-dated switching, for example, where a new contract with a customer is not finalised until after

the commencement date of that contract. Another point raised in submissions was that the allocation agent ought to rely on the registry to determine which gas gates a retailer was currently trading at.

DRAG

The issue was discussed in two meetings of the DRAG. Options highlighted for addressing the breach activity were to remove the timing requirement in the rule, require the allocation agent to source retailer trading data directly from the gas registry, or to maintain the status quo.

The option preferred by the DRAG was to amend the requirement in rule 39 so that notifications only have to be supplied to the allocation agent in respect of commencement, conclusion or amendment of *supplementary* agreements to TSAs. Under this arrangement, retailers would be free to submit volumes at any gas gate without notifying the allocation agent in advance and, unless a trading notification for a supplementary agreement was notified, allocations would be reported against each retailer's default TSA.

Associated with this option would be a requirement on the allocation agent to use the gas registry to determine which retailers should be submitting consumption against each gas gate for a consumption period. This would replace the current validation and completeness checks that utilise trading notifications. The DRAG considered that if an anomaly was discovered between the active-ICP data in the registry and submissions received then the allocation agent should check with the retailer in question at the time of the initial allocation whether the retailer was aware of the problem (similar communications take place under the current arrangements). If by the interim allocation the positively identified anomaly remained unresolved then the allocation agent should allege a breach against the retailer.

One further issue had to be resolved with this proposal. If a retailer begins trading at a gas gate according to the allocation agent's check of the registry but the retailer does not submit any consumption information for that gas gate for the consumption period then arguably the allocation agent should estimate the consumption information for that retailer in accordance with rule 43.1. Possible ways to allocate load could include a nominal number of gigajoules per ICP, an ICP-day average for the gas gate, an ICP-day average for the retailer, or a scaling process applied to the each retailers' submissions based on the number of ICPs reported by the registry. On the latter, DRAG members noted that a process had been implemented in electricity reconciliation whereby traders' submissions were scaled up or down according to the difference between reported ICPs and registry ICPs, but due to a misalignment with reference dates it gave unsatisfactory results. Also, any scale factor applied to a zero submission would still result in a zero allocated quantity.

The DRAG decided that a missing submission for a retailer gaining a single ICP in allocation groups 4 or 6 would probably not raise a material issue at a gas gate so they were happy for the allocation agent to provide a zero estimate of consumption information for the initial allocation in this case, although as discussed above this should be flagged if it isn't fixed at the interim allocation. However

where allocation group 1 or 2 ICPs are concerned there is likely to be a sizeable difference in the volume concerned and the missing consumption could have a material impact on allocations at the gas gate, therefore it should be addressed at the initial allocation (by the allocation agent verifying with the relevant retailer or ultimately providing an estimation).

Section 43(N) analysis

Assessment of benefits and costs

The main benefits of making the change above are that: retailers will no longer have to complete the manual process of submitting trading notifications to the allocation agent where changes have occurred; the allocation system will use the most up-to-date information available on which retailer is responsible for each ICP at each gas gate; and, there will be a reduction in the compliance/administration costs associated with trading notification breaches for the allocation agent, the industry body and retailers.

The most significant cost associated with making the change above is that the allocation system will require modification to integrate with the gas registry and to amend the processes which currently rely on information provided in trading notifications. This change would be more substantive than the other system modifications necessitated by this Statement of Proposal (NZX's initial indication of the one-cost is between $60,000 and $120,000), therefore retailers must be happy that the benefit to them sufficiently outweighs the cost, which they will ultimately bear.

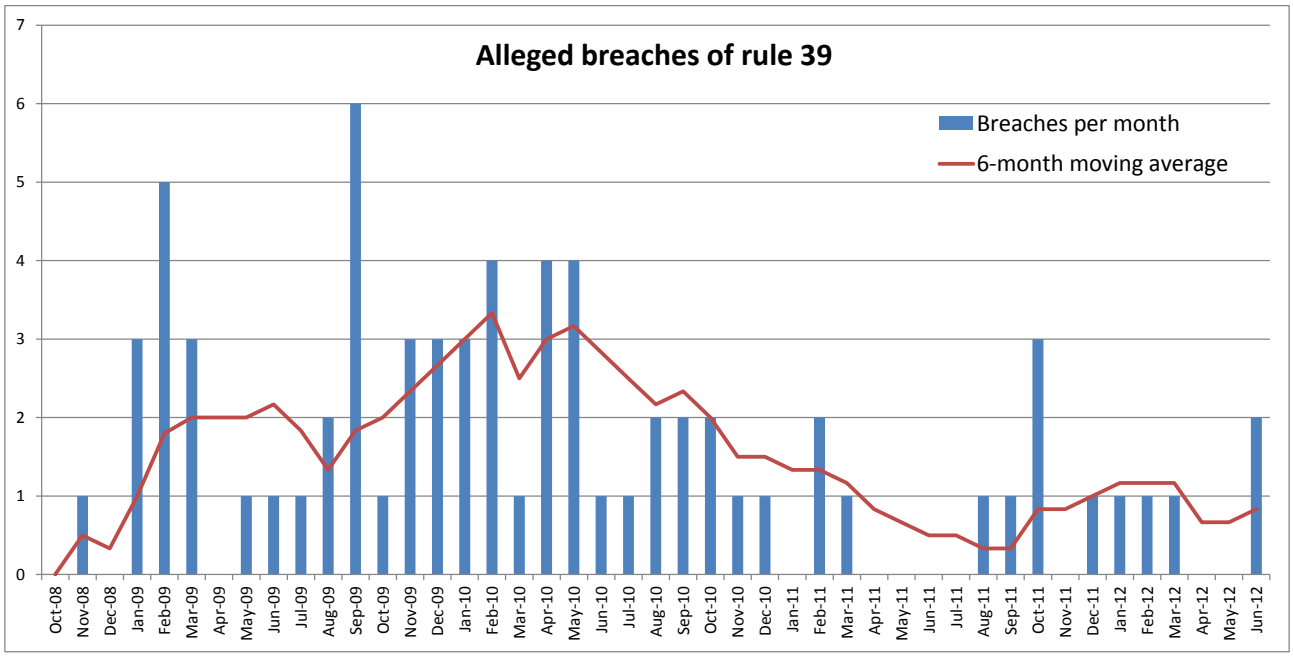
A quick analysis suggests that the change may provide a small net benefit: assuming that all administrative costs for a retailer associated with trading notifications (determining and submitting notifications to the allocation agent plus dealing with any alleged breaches) amount to one day per month. This translates to roughly 5% of an FTE. Assuming further that the average salary for a business analyst is $80,000 per annum and only five of the current retailers require this resource (not all retailers experience significant churn), then the industry would save $20,000 per year if the change was made. At the upper estimate of the development cost, and with no discounting, the payback period would be six years.

Other reasonably practicable options

The chart below illustrates the incidence of breaches of rule 39 since go-live of the Rules. It appears that there has been a gradual decline in non-compliance to an average level of one per month. If this trend continues, and participants consider that the inconvenience of responding to alleged breaches does not necessitate substantial changes to the allocation system, then another practicable option has been identified which would be less costly (in addition to the option of retaining the status quo).

The alternative proposal is to keep the rule requiring trading notifications to be given for a gas gate but to relax the deadline, for example "to be provided as soon as practicable but no later than the fourth month following the consumption period". This effectively delays the test of compliance with

rule 39 until the interim allocation, so whilst there is no saving in the time required to submit trading notifications, there are likely to be less breaches of the rule so compliance costs would be reduced. Gas Industry Co considers that if this option was chosen there should be a caveat around TOU load, that retailers should still provide a trading notification by the existing deadline, given the material difference in the amount of gas involved and therefore the need to have accurate and timely information at the initial allocation.



Rules drafting in appendix

The rule changes and associated amendments are included in the marked-up Rules (Appendix B). The changes necessary to the allocation system are not covered by the Rules (they would form part of a revised functional specification) but will be agreed with the DRAG as part of the implementation of the changes that receive ministerial approval.

Q9: Do you agree with the proposal to amend the rules relating to trading notifications?

8 Additional issues raised by the DRAG

The DRAG discussed several issues that were not included in the Options Paper and that, whilst being relatively minor in effect, would not fall under the provisions in section 43N(3) of the Gas Act as they have the potential to impact on the interests of allocation participants. Gas Industry Co considers that it is appropriate to seek wider feedback on these issues, so this section presents options and analysis based on DRAG discussions but invites submitters to propose alternate options for consideration. To the extent that there is sufficient consensus in submissions, each proposal will (or will not) be included in the Recommendation to the Minister.

The issues discussed in this section are:

- audits of specific gas registry fields relevant to the Rules;
- responsibility for event audit costs;
- audits of major system changes;
- the removal of rule 42; and
- wider publication of the GAR170 (submissions summary) report.

8.1 Audits of specific gas registry fields

Currently, audits are carried out at regular intervals to assess the performance of the allocation agent and allocation participants in terms of compliance with the Rules. Gas Industry Co may also commission specific event audits to ascertain the cause or causes of any particular event that may arise in relation to the Rules.

One of the objectives of a retailer performance audit under the Rules is to assess the process used to convert read-to-read volumes into the amounts of energy that are subsequently submitted to the allocation agent and billed to customers. With consideration being given to adding metering-related fields to the gas registry, several of the factors necessary for this calculation (as well as other parameters necessary for retailers' allocation processes) would be managed by participants other than the responsible retailer, so are not covered by the retailer's performance audit. Experience from the

performance audits undertaken so far has highlighted instances where retailers have been found to exhibit non-compliance due to reliance on the existing information in the gas registry (most notably ICP altitude).

The population of gas registry fields is governed by the Gas (Switching Arrangements) Rules 2008 (the Switching Rules) but these rules contain no audit provisions, so whilst there is a rule requiring maintenance of current and accurate information relating to each ICP, there is no way to independently assess or verify the accuracy of the information in the registry which is used in the reconciliation process.

In addition, although the Reconciliation Rules require compliance with NZS5259:2004, achieving this compliance does not implicitly ensure that the registry is populated accurately. NZS5259:2004 only ensures asset quality meets an appropriate standard, not that information relating to those assets is accurately portrayed in a third party database such as the gas registry.

DRAG

The DRAG discussed two options for dealing with this issue. The first option was to create a new rule in the Reconciliation Rules to make explicit that the accurate and timely population of any registry field that contains information relevant to reconciliation would fall within the scope of a performance audit on the participant responsible for that field. The second option was to add audit provisions to the Switching Rules, so that all obligations under those Rules could be audited rather than just the parts relevant to reconciliation. It was agreed that wider feedback should be sought on the two alternatives..

The DRAG was clear that, whichever option was pursued, any audits of registry information should be carried out concurrently with the existing performance audits under the Reconciliation Rules so as to reduce the administrative cost. Set out below is a draft rule which, if included in the Reconciliation Rules, would provide a clear obligation against which allocation participants could be audited.

> **26.5** In respect of any ICP on the **registry** each responsible **distributor**, **meter owner** and **retailer** must ensure that any information that any part of the **rules** requires use of, must:
>
> **26.5.1** be accurate and complete; and
>
> **26.5.2** not be misleading or likely to mislead; and
>
> **26.5.3** be updated in a timely manner; and
>
> **26.5.4** support compliance with **NZS 5259**.

This Statement of Proposal does not extend to recommending changes to the Switching Rules so the assessment henceforth shall be limited to the consideration of whether or not to pursue the above

rule change. Nevertheless, we welcome feedback from participants on which option is preferred. It should be noted that Gas Industry Co is currently working on a project to include additional metering fields in the gas registry so a proposal to add audit provisions to the Switching Rules could be incorporated into a Statement of Proposal arising out of that workstream.

Section 43(N) analysis

Assessment of benefits and costs

The benefits of implementing the above rule change include:

- incentivising accurate registry population by all allocation participants;
- accentuating the purpose of the registry which is to provide an authoritative database of current and historical information on all ICP parameters;
- reducing UFG where this has arisen due to miscalculation of consumption stemming from inaccuracies in registry parameters (examples of this have been reported in the event audits carried out for the Greater Hamilton and Palmerston North gas gates); and
- improving the overall accuracy and reliability of the downstream reconciliation process.

The costs associated with the proposal are the extra costs of auditing registry fields. For retailers—who are already subject to regular performance audits—the additional cost is likely to be marginal as it will form part of the existing audit. For meter owners and distributors the current Rules do not contain any obligations worthy of an audit so the new rule would introduce costs on those parties. However, each participant is able to proactively minimise these costs by ensuring that they can demonstrate compliance with the Rules.

Other reasonably practicable options

As mentioned above, rule 58 of the Switching Rules already requires ICP parameters in the registry to be maintained with current and accurate information. It is open to any party to allege a breach if they believe that a participant is failing to comply with this rule, so the compliance arrangements could be used as a means to address any inaccuracy. The limitations of this approach are that the current rule only has a 'reasonable endeavours' requirement, so it presents quite a high bar to test for non-compliance, plus in order to achieve the same industry-wide improvement in registry data management that an audit regime would enable, it would require every responsible retailer, distributor and meter owner to be breached.

Keeping the status quo is also an option, since participants have noted that communication channels already exist whereby inaccuracies in registry parameters are identified and challenged. But based on the advice of the DRAG it appears as though this is not a desirable outcome. It was felt that there is

not a strong enough incentive on the distributor/meter owner to resolve issues in a timely manner while for the retailer the discrepancy could be causing an ongoing impact on submission accuracy.

Given Gas Industry Co's preference for industry-wide arrangements for the continual improvement of the quality of registry data, it is our opinion that the practicable options are limited to either the proposed new rule or the addition of audit provisions to the Switching Rules.

Q10: Do you agree that a rule should be created enabling performance audits to cover the accuracy of data population in the registry? Do you think that audits should be limited to certain fields relevant to reconciliation or would you prefer broader audit arrangements contained within the Switching Rules?

8.2 Responsibility for event audit costs

The DRAG discussed a change to rule 75 that would better align the apportionment of event audit costs with the 'cost-to-causers' principle.

In the first instance, the responsibility for event audit costs depends on whether or not the auditor finds a material issue. If a material issue is found then the cost of the audit is met by the party or parties responsible for causing the material issue. If no material issue is found then the costs of the audit will be apportioned between the relevant parties to the audit as determined by Gas Industry Co. The problem identified applies to the former situation, in the case where a material issue is discovered by the auditor but this issue does not fully account for the event that triggered the audit; in this situation the party to whom the material issue relates must pay the full cost of the audit even though the 'true' cause of the audit remains undiscovered.

The example highlighted in the DRAG meeting was where a gas gate event audit was commissioned due to high UFG, but the only material issue discovered related to a small proportion of the UFG at the gate. The other issue noted was the possibility that one of the parties being audited could cause the escalation of audit costs by being uncooperative but would not have to contribute to those costs if they didn't raise a material issue. Under the current rule drafting, the auditor has no discretion to apply weightings to the amount that parties must pay.

The DRAG agreed that the Rules should be amended to allow the auditor to determine the contribution of the material issue to the costs of the event audit. If there is a residual balance outstanding (or no material issues are discovered) then the remaining costs shall be apportioned between the relevant parties as determined by Gas Industry Co. The DRAG considered that for a gas gate audit the 'default' cost allocation methodology used by Gas Industry Co should be to divide the cost by the number of retailers trading at the gate.

The following redrafted rule (included in Appendix B) was approved by the DRAG to put this change into effect:

75. Responsibility for audit costs

75.1 In relation to an audit under rule 65, the person that is being audited must pay the costs of the auditor.

75.2 In relation to an audit under rule 66, the following provisions apply:

75.2.1 If the auditor concludes that one or more material issues have been raised in relation to compliance with these **rules**, the **allocation agent** or the **allocation participants** to which the material issues relate must pay a proportion of the costs of the auditor that reflects:

(a) the contribution of those material issues to the event for which the audit was commissioned, as determined by the auditor; and

(b) their contribution to those material issues as determined by the auditor.

75.2.2 If the auditor concludes that no material issue has been raised in relation to compliance with these **rules**, the costs of the auditor must be apportioned between such of the **allocation agent** and the **allocation participants**, as the case may be, as the **industry body** determines in its sole discretion.

75.2.3 If rule 75.2.1 applies and the costs of the auditor are not met in full under that clause, then the remaining costs of the auditor must be apportioned between such of the **allocation agent** and the **allocation participants**, as the case may be, as the **industry body** determines in its sole discretion.

75.3 For the purposes of this rule, the costs of the auditor are those costs that have been agreed between the **industry body** and the auditor.

Q11: Do you agree that rule 75 should be amended to allow the auditor more discretion in determining who should be responsible for paying the costs of an event audit?

8.3 Audits of major system changes

Another suggestion from the DRAG was that any allocation participant carrying out a system change that is likely to impact on its obligations under the Rules should be required to submit to an audit to ensure that the new system remains Rules-compliant. A similar provision is included in Part 15 of the Electricity Industry Participation Code 2010. As is the case with electricity, the audit requirement would only apply if it was a material or major system change.

An obvious question in creating such a rule is what constitutes a "major" system change. The DRAG observed that the decision on whether a change was major or not could be made by Gas Industry Co after it had been notified of the proposed change by the relevant participant. However, this suggestion, if carried through to the Rules, does not remove the ambiguity around whether a participant should notify a change in the first place.

Gas Industry Co favours specifying what a major system change is up-front, preferably in the guise of an industry guideline (or an amendment to the existing audit guideline). As an example in the Information Paper for Approved Auditors v2 (August 2009), the Electricity Commission referred to:

> Changes such as software bug fixes, upgrades to database management operating systems, communications and other third party software are not regarded as material.

The new rule would require participants planning to implement a major system change to notify Gas Industry Co at least 90 days before go-live of the proposed system change. This lead time would allow Gas Industry Co to appoint an auditor who would assess whether the system change was likely to be appropriate for the purposes of achieving compliance with the Rules. The auditor would be required to complete his/her audit at least 30 days before go-live of the proposed system change. This would give sufficient time for Gas Industry Co and the participant being audited to consider any recommendations arising out of the audit report.

In discussions with the DRAG and also with an experienced electricity and gas auditor, it was recommended that a post go-live audit should also be carried out to test the accuracy of the system change after a few months of operation. Two of the benefits of a post go-live audit at this later stage are that it allows time to iron out any initial system bugs and it tests the creation of interim allocation submissions which use the historical estimation process against the submissions created for the initial allocation. The proposal is to amend rule 65 as follows below. At this stage, the drafting does not include a requirement for a post go-live audit. Gas Industry Co welcomes feedback on whether this should be mandatory or optional

65. Industry body to commission performance audits

65.1 The **industry body** must arrange at regular intervals performance audits of the **allocation agent** and **allocation participants**

65.2 The purpose of a performance audit under this rule is to assess in relation to the **allocation agent** or an **allocation participant**, as the case may be, –

65.2.1 The performance of the **allocation agent** or that **allocation participant** in terms of compliance with these **rules**; and

65.2.2 The systems and processes of the **allocation agent** or that **allocation participant** that have been put in place to enable compliance with these **rules**; and

65.2.3 Whether, after the implementation of a proposed change notified under rule 65.4, the **allocation agent** or that **allocation participant** will be compliant with these **rules**.

65.3 The **industry body** in its sole discretion will determine –

65.3.1 When a performance audit under this rule is to be conducted;

65.3.2 The person who is to be audited;

65.3.3 Subject to rule 68, who will be appointed as the auditor; and

65.3.4 Any terms and conditions for the performance audit.

65.4 If the **allocation agent** or an **allocation participant** intends to make a change to any of its systems, processes or procedures that it considers is material, it must, at least 90 days before the change is to take place, advise the **industry body** of the proposed change.

65.5 Upon notification of a proposed change under rule 65.4, the **industry body** must arrange a performance audit of the **allocation agent** or **allocation participant** to be completed at least 30 days before the change is to take place.

65.6 The purpose of a performance audit arranged under rule 65.5 shall be limited in scope to an audit of the impact of the proposed change on the **allocation agent** or **allocation participant's** systems, processes and procedures.

Section 43(N) analysis

Assessment of benefits and costs

The benefit of implementing the above rule change is that the overall accuracy of the downstream reconciliation process will either be improved or ensured of becoming no worse as a result of a participant making a major change to its systems. Gas Industry Co is aware that there has been at least one instance in the electricity market where a participant's system had changed and subsequent data from that participant was inaccurate causing a knock-on effect to other traders. The purpose of the proposed audit above would be to ensure that system changes would be accurate but also that other participants would be unlikely to be harmed by another participant's system change.

The cost of implementing the rule change amounts to the time and resources of an auditor to perform the system change audit. The fact that only major changes will be audited implies that such audits will likely be infrequent. It is also reasonable to assume that any major IT system refresh will require a substantial project budget and that an audit against the Rules would represent a small proportion of that budget, but would bring the benefit of experienced, third-party involvement in the testing phase of the development. Gas Industry Co therefore considers that there is a net benefit to both the participant implementing the change and to the wider industry, whose risk of being adversely impacted is reduced.

Q12: Do you agree that a rule should be created to require audits of major system changes? If so, do you agree that a post go-live audit should also be required? Do you think the definition of "major" should be specified in the Rules or in an industry guideline?

8.4 Removal of rule 42

Rule 42 requires TSOs to give notice to each retailer receiving gas at a gas gate connected to the TSO's network of the unvalidated daily energy quantities that were injected the previous day. An exemption from rule 42 currently applies for certain gas gates where this information is unavailable, that is:

- for gas gates without telemetry metering, transmission system owners are exempt from the requirement to comply with rule 42 on all calendar days; and/or

- for gas gates with telemetry metering but without live System Control and Data Acquisition (SCADA), transmission system owners are exempt from the requirement to comply with rule 42 on days that are not business days.

Gas gates with telemetry metering and live SCADA data must comply with rule 42 on all calendar days. Under the current exemption, a high proportion of gas gates are exempted from rule 42.

DRAG

When this issue was discussed by the DRAG, it emerged that the original intent of the rule was to ensure that participants had access to estimated day-end quantities at a time when objections were being raised about disclosure of quantities at certain gas gates under the Vector Transmission Code. However, those concerns about disclosure have dissipated over time such that those quantities are now available to shippers on OATIS pursuant to Schedule 4 of the VTC. It therefore appears that rule 42 is redundant and can be deleted.

As part of the follow-up to the discussion, Vector provided clarification on the availability of information: For gas gates without telemetry metering, Vector indicated that it will continue to upgrade delivery points so that the list of gas gates where unvalidated data are not provided to OATIS would decrease over time. It was noted that some of the gas gates without telemetry metering are direct connect gas gates off the Maui Pipeline so estimated day-end information at such gates would be irrelevant for all retailers other than the responsible retailer (who potentially has access to telemetry data from the customer GMS).

For gas gates with telemetry metering but without a live SCADA feed, Vector is currently providing unvalidated data on all days to OATIS on a reasonable endeavours basis. If problems are encountered, Vector may not be able to provide data on non-business days.

Gas Industry Co's proposal

Based on the discussion and advice of the DRAG, Gas Industry Co proposes deleting rule 42 from the Rules. This would also have the effect of making the exemption redundant. If it is discovered that any participant still relies on this rule in order to access gas gate injection information, then Gas Industry Co will consider retaining the rule in an amended form which takes account of the situations provided for in the current exemption.

In light of the proposed reduction in reporting by each TSO, it has been suggested that as a safeguard the obligations in rule 28.4 could be extended to cover daily delivery information supplied by TSOs. Gas Industry Co welcomes feedback on the merits of this idea or whether participants feel that contractual arrangements provide sufficient obligations around data integrity.

Section 43(N) analysis

Assessment of benefits and costs

The benefit of implementing the above rule change is that the compliance and administrative costs associated with maintaining the exemption for rule 42 will no longer apply. There is no change to the status quo in terms of availability of information.

Given Vector provides most of the information required by the rule under contractual obligations, Gas Industry Co finds there is no cost involved in removing rule 42 from the Rules. Submitters are invited to provide feedback on whether there will be any practical difficulties or problems associated with deleting the rule.

Other reasonably practicable options

Other reasonably practicable options are to keep the rule in its current form and allow the exemption to lapse or to keep the rule in an amended form which incorporates the exemption.[12] In the former case, when the exemption expires Vector would be in breach until such time as all gas gates had either SCADA or telemetry installed. It is unlikely that such a move would provide an economic benefit and furthermore it would be inconsistent with the proposal to allow for unmetered gas gates (as per Section 4.3). The option to retain an amended rule 42 would be Gas Industry Co's preference if there is any indication in submissions that the rule is not redundant.

Q13: Do you agree that rule 42 is redundant and should be deleted from the Rules? Will your organisation be adversely affected by its removal? Should the obligations in rule 28.4 be extended to transmission system owners?

8.5 Publication of GAR170

Several of the options discussed with the DRAG and put forward in this Statement of Proposal have arisen due to members' experience with electricity reconciliation arrangements, particularly where those arrangements are seen to function more efficiently than the equivalent processes in gas.

Another proposal which falls into this category is to broaden the recipients of the GAR170 report which summarises retailers' monthly submissions by allocation group and gas gate. Currently this report is only available to Gas Industry Co and is used for market monitoring and investigation of anomalies arising out of allocation results. Retailers themselves do not see each other's submission data – they can only see allocated volumes aggregated by retailer and gas gate in the GAR070 report. One of the DRAG members noted the contrast with electricity where submission data is visible to participants and can be (and has been) used to identify and resolve allocation issues caused by other traders.

[12] The status quo, which would be to maintain the rule and continue the exemption is not a feasible option, given the risk of Gas Industry Co conferring a de facto rule change without ministerial consent

The electricity reconciliation report alluded to in the DRAG is the *GR-130 Electricity supplied/submitted comparison report* (SupSub report). This compares quantities submitted to the reconciliation manager with actual sales, aggregated by retailer and balancing area for a consumption period. Table 4 compares the GAR170 report with the SupSub report.

Table 4. Comparison of GAR170 and SupSub reports

Parameter	GAR170	SupSub
Visibility	Gas Industry Co	EA & reconciliation participants
Frequency	The AA must produce this summary report for each initial, interim and final allocation performed during the month by 0800 hours on the 5th, 11th, and 16th business days [and] for each special allocation performed	The RM must deliver the report to all participants and the board by 1600 hours on the 7th business day of each calendar month, and in respect of revisions, by 1200 hours on the last business day of each month.
Detail rows	Consumption period Allocation stage Network Code Gas Gate Allocation participant Aggregation Level Total quantity (GJ) Estimate Indicator	Consumption period Revision cycle Balancing area Network ID Participant code Total retailer consumption from submissions Total retailer sales (electricity supplied) Difference (kWh) Sales/submission ratio

The purpose of the SupSub differs from the GAR170 as it is a comparison of quantities submitted for reconciliation with quantities invoiced to customers. The report which fills this purpose for gas is the GAR080, which is available to the public on the allocation agent website. It differs from the SupSub in that the quantities in the GAR080 are aggregated up to a rolling 12-month total per gas gate. Anecdotal evidence from participants and auditors suggests that the GAR080 is not widely used and/or is not very useful in its current format.

Gas Industry Co's proposal

There is a clear efficiency benefit from the greater transparency of information, so Gas Industry Co is willing to progress a change to the visibility of the GAR170 report if this receives majority support from industry participants. This would not require a rule change as it is not a report mandated by the Rules, it would be a relatively simple fix to participants' permissions by the allocation agent.

If participants do not support this proposal (which allows for a greater level of scrutiny than the SupSub report) then an alternative option could be to amend the GAR080 to a more user-friendly format which more closely resembles the SupSub. The information disclosed under this option would be limited to an aggregated figure per gas gate, instead of separate allocation group-level data.

Q14:	*Do you support the proposal to allow allocation participants access to the GAR170 report? If not, would you support disclosure of submission information consistent with the SupSub report?*

9 Minor and technical amendments

As discussed in section 1.2 of this paper, whenever Gas Industry Co considers that recommended rule changes are minor and will not adversely affect the interests of any person in a substantial way then, in accordance with section 43N(3) of the Gas Act , it is not required to carry out the assessment specified in section 43N(1). This section proposes several of these changes, many of which were discussed by the DRAG. Those proposed rule changes are:

- future-proofing the reference to NZS 5259:2004;
- amending the calculation of seasonal adjustment daily shape values;
- allowing for a special allocation to replace an initial, interim or final allocation where necessary;
- apportioning the ongoing fees on the basis of interim allocation results instead of initial;
- giving of notices to allocation participants by the allocation agent;
- deleting the transitional provisions.

9.1 NZS 5259:2004

The Rules currently make several references to NZS 5259:2004, the gas measurement standard overseen by Standards New Zealand. It is good drafting practice to make references to other legislation future-proof by incorporating an acknowledgement that such legislation may be subject to change. In fact, it has been indicated that NZS 5259:2004 was being reviewed by Standards New Zealand at the time the DRAG was meeting.

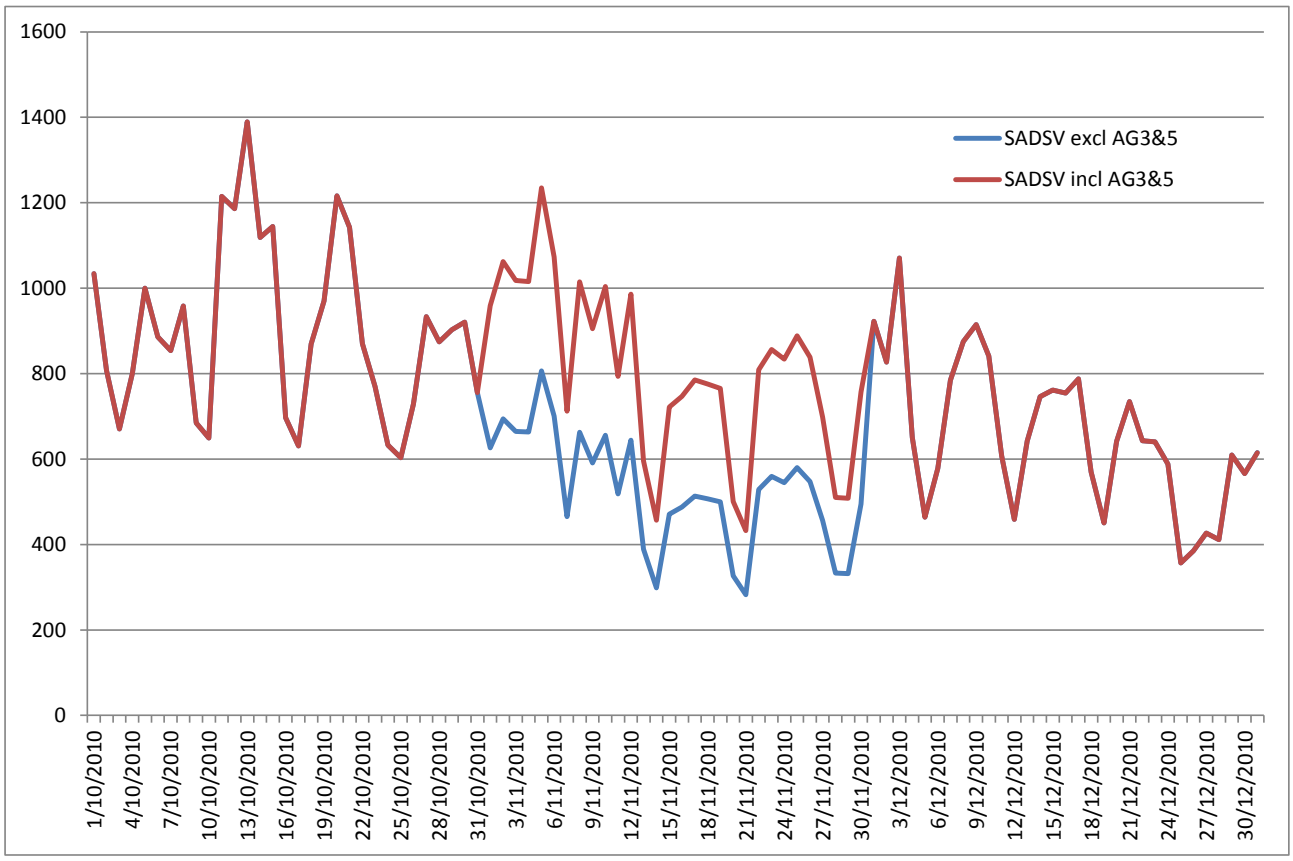
The DRAG proposed to remove the date suffix from the references to the Standard in the Rules and to include in the interpretation section a note that any references to NZS 5259 in the Rules incorporate any successor to the Standard. Gas Industry Co agrees with that recommendation. The draft rules in Appendix B have been marked up to reflect this change.

9.2 Calculation of SADSV

Seasonal adjustment daily shape values (SADSV) are derived by the allocation agent for each gas gate and each allocation and comprise the gas gate residual profile (GGRP) produced at that allocation along with the GGRPs from the previous 23 allocations. The SADSV (where they exist prior to an

allocation) are required to be used by retailers in their historical estimates to apportion read-to-read volumes to consumption periods. The intention is that the SADSV reflect the seasonal swing of gas demand in the mass market, and can be used to profile volumes where no daily data exists.

When Nova Energy purchased the customer base of the E-Gas Group of Companies, a dynamic profile was required in order to take account of the mid-month purchase date in the non-TOU allocation groups. The profile involved submitting volumes as allocation group 5 in order to split the non-TOU load into the period before and after Nova Energy took responsibility. An unintended consequence of the use of allocation group 5 for what was previously allocation group 4 and 6 consumption data was a step change in the GGRPs which was then passed through to the SADSVs. This step change is illustrated in the chart below for one of the affected gas gates.



This kind of step change has the potential to impact on the production of retailers' consumption submissions by shifting more load into the surrounding consumption periods, leaving less in the month in which the sale took place. For example, if a customer at the above gas gate had its meter read on 15th October and 15th December then the apportionment of the read-to-read volume between months would be as per Table 5.

Table 5. Apportionment of read-to-read volume between months

SADSV	Oct-10	Nov-10	Dec-10
Including AG3&5	29.3%	48.5%	22.3%
Excluding AG3&5	35.2%	38.0%	26.8%

In the worst case, these irregularities can contribute to a retailer breaching the rule 37 accuracy threshold and, as a consequence, paying to compensate other retailers through the compliance regime. However, a simple fix to remove the anomaly is to disassociate the SADSV calculation from the GGRP, by retaining allocation group 3 and 5 allocation quantities in the seasonal profile. Thus the two formulae would be:

$$GRP_d = EI_d - AQ_{1,2,3\&5}$$

$$SADSV_d = EI_d - AQ_{1\&2}$$

9.3 Special allocations

Under the current drafting of Rule 51, a special allocation, when directed, exists distinctly from an initial, interim and final allocation. A number of situations have occurred where a special allocation has been directed immediately after an initial allocation to correct an error and the results from the special are able to be used instead of the initial for upstream billing, mismatch calculations, BPP invoicing etc. However the Rules are specific about where initial allocation results must be used, for example, in rule 37 (accuracy of retailer consumption information) and rule 16 (allocation of ongoing fees). Where the special allocation results have been used for upstream purposes, it would be more consistent to use the same data for the purposes of the Rules.

The proposal is to give Gas Industry Co the discretion to determine—along with any specific circumstances that may apply to the special allocation—whether that special allocation is a replacement of the preceding allocation or a distinct allocation for the purposes of the Rules. Where the special allocation is deemed to be a replacement then it is those results which should be used in the calculation of rule 37 breaches, allocation of ongoing fees etc.

9.4 Ongoing fees

In discussions with the DRAG on the subject of ongoing fees it was suggested by one member that the interim allocation results may provide a better basis than the initial allocation results for apportionment of the fees between retailers. It is widely acknowledged that, due to the availability of meter readings spanning the consumption period for mass market consumers, the interim allocation is much more accurate than the initial. It therefore seems that the policy of allocating costs on the basis of volumes would be better met using interim data.

The discussions also covered the issue of timeliness, in that the most recent interim data available for use in the calculation would relate to consumption five months ago. This was not considered to be a concern because the same total fee is charged each month, so seasonal differences between each retailer's proportion of allocated volumes may shift the intra-month splits but wouldn't affect the overall annual cost. Further to this, under the current rule the data used is two months old so there is not a strong link between the invoice month and the initial allocation volumes used in that month.

A further proposal to improve the fairness of the fee allocation is to use the best available allocation information for each consumption period when the end of year wash up is performed; this covers off any special allocations or re-publications that may have occurred throughout the year.

The final minor change proposed is to align the payment year for the monthly fees with the other market fees. Currently the ongoing allocation costs are estimated, notified, recovered and washed-up on the basis of the gas year (1 October to 30 September) but all other Gas Industry Company market fees use the financial year (1 July to 30 June). Changing the payment year to align with the financial year will have no impact on participants other than to improve the overall efficiency of the market fee arrangements by reducing the workload to a single set of estimates each year for Board approval and a single wash-up process after the end of the year.

9.5 Giving of notices

Rule 23.2 currently requires that the Allocation Agent use the participant register provided for by the Gas (Switching Arrangements) Rules 2008 when sending notices and notifications to allocation participants.

Given the importance of the allocation process and results, it is imperative that the communications protocol is consistent and reliable, and therefore mandating the recipients of notices makes sense; however, for larger companies the contact details in the Gas Registry often refer to a person in a different business unit with no interest or use for the allocation results. The Allocation Agent has found that it is more efficient to keep its own contact list for sending notices and this has worked effectively since go-live, since participants are incentivised to keep their details up to date if they wish to continue receiving notifications.

The proposal is to remove the reference in rule 23.2 to the participant register in the Gas (Switching Arrangements) Rules 2008 and replace this with a requirement on allocation participants to provide the allocation agent with nominated contact details directly and to maintain these details. This puts the onus on allocation participants to ensure that the allocation agent has the correct details for the sending of notices and notifications and also for any queries or issues.

9.6 Deleting the transitional provisions

The transitional provisions contained in Part 5 of the Rules are no longer relevant. The transitional provisions outline various practices that were necessary for the implementation of the Rules, such as

requiring the provision of pre go-live consumption information, setting out how AUFG factors are calculated for the first two gas years after go-live, how fees are apportioned and allowing for transitional exemptions and audits. The transitional period ended on 30 September 2010 and Part 5 is now redundant and will be removed.

Q15: Do you agree with the minor and technical amendments proposed in this section? Do you agree that the proposals meet the criteria in section 43N(3) of the Gas Act?

10 Other transitional issues

10.1 Current exemptions

The timing of this rules review is such that all current exemptions will expire before any new rules may come into effect. In order to enable a smooth transition to any new rules, Gas Industry Co proposes to extend all of the current exemptions by one year from their current expiry dates. This can be done by Gas Industry Co closer to the time those exemptions expire. Once the new rules take effect, all of the current exemptions will become redundant. Gas Industry Co will follow the process prescribed in the Rules for the variation of exemptions and will to consult on these exemptions later in the year.

10.2 Consequential rule changes

As a result of many of the rule changes proposed throughout this Statement of Proposal, several other rules have required amendment to reflect the new rules or to incorporate new definitions. Care has been taken to preserve the policy intent of these consequential rule changes. The draft rules attached in Appendix B have been marked up to include these consequential rule changes.

Gas Industry Co welcomes feedback on any of these consequential amendments, particularly if submitters feel these amendments may have inadvertently changed the intention of the underlying rules. It is likely that the drafting of the new rules will differ slightly from the ones proposed in Appendix B as further minor amendments are made as a result of consultation. However, the policy intent of those changes will not change.

10.3 Development costs

Associated with the present proposal to amend the Rules is the cost to the allocation agent in adjusting the allocation system to remain rules-compliant. Gas Industry Co considers that any such costs can be recovered in accordance with the provisions for ongoing costs in rule 15. Gas Industry Co is also satisfied that applying the current cost allocation methodology to these costs presents a fair reflection of the 'beneficiary-pays' principle.

The only exception to this would be the change proposed in section 7.2 to integrate the allocation system with the gas registry to alleviate the need for trading notifications. This change is to the benefit of those retailers who regularly need to notify the allocation agent of changes to gas gate trading and this is likely to be correlated with the high churn of mass market retailers rather than retailers who focus on the TOU market (and don't experience significant churn). Gas Industry Co is therefore open

to considering this enhancement as a separate change request using an alternative cost recovery mechanism. Put another way, mass market retailers who consider this change to be sufficiently desirable would need to fund it on a per-ICP basis.

Any changes that arise out of the June 2013 Statement of Proposal, such as D+1 or a top-down algorithm, would require more substantial redevelopment of the allocation system. If such changes were to go ahead Gas Industry Co considers that it might not be reasonable to use the current cost allocation methodology (based on allocated volumes) for recovery of the development costs. We therefore propose to begin drafting a new rule which allows for the recovery of development costs via an alternative cost allocation methodology. This rule will be developed in collaboration with the DRAG, but it may be useful to include in the current set of proposed changes so that any modifications required by the 2013 Statement of Proposal can be developed concurrently with the 2013 Recommendation to the Minister. Such a rule would need to provide for cost allocation on the basis of causer pays or beneficiary pays, where that can be determined.

10.4 Go-live date of new Rules

Gas Industry Co will specify a go-live date for the amended rules. Gas Industry Co recognises that some participants may need sufficient time before the rules come into force to make appropriate system changes. Establishing a clear date provides participants with certainty as to when the new processes will be effective from. Gas Industry Co suggests a go-live date of 1 June 2013. According to the timeline in section 11, this would provide participants with at least 7 months to prepare for the changes. In order to smooth the transition to the new rules Gas Industry Co may ask the DRAG to reconvene as an implementation group. If DRAG members agree, organisations not represented on the DRAG may attend the relevant sections of any DRAG meeting(s) set aside for these purposes.

Q16: Do you have any comments on the transitional issues discussed in this section?

11 Overall assessment and next steps

11.1 Overall assessment of costs and benefits

Throughout this paper, Gas Industry Co has presented an assessment of the qualitative benefits and costs of each issue in this Statement of Proposal. We find that each option will independently result in a qualitative net benefit on the downstream reconciliation process. In terms of making a quantitative assessment of the proposed changes, the costs to the industry of the proposed changes are mostly in the form of changes required to the allocation agent's systems and any changes required to participant systems and processes.

Gas Industry Co has asked the allocation agent to provide a cost estimate for the changes that may be required to their systems and processes. Based on the information provided by Gas Industry Co, the allocation agent expects a rough total estimate for all of the changes in this Statement of Proposal of between $200,000 and $400,000 which includes the trading notification option of integrating the allocation agent's system with the gas registry.

Gas Industry Co does not expect there to be significant costs to participants in terms of the new rules requiring changes to their own systems and/or processes. The exception to this would be the two proposed audit changes—audits whenever a participant plans to carry out a major system change; and performance audits that will check accurate registry population (if that option is preferred). On the former, Gas Industry Co expects that the cost of a performance audit will be minor in comparison to the cost of carrying out a major system change. On the latter, the costs of audits will increase if auditors must check that participants are accurately populating the registry. As a rough guide, Gas Industry Co expects that the marginal increase in audit fees to be in the vicinity of 25% of total audit costs. While the benefits of having these audits carried out are difficult to quantify, they can be expected to ensure a more accurate and fair reconciliation process for all participants. It is not inconceivable that any system or process errors that may arise in the absence of these audits would swamp the costs of carrying out the audits.

The main quantifiable benefit to implementing these proposed rule changes is that the strict compliance option for handling the outstanding exemptions will be avoided. Gas Industry Co is not willing to grant exemptions on an ongoing annual basis for the transitional problems that were

encountered shortly after go-live. The exemptions had been rolled over until such time that a review of the Rules was carried out. Thus, either the Rules must be changed or the outstanding exemptions revoked in favour of strict compliance. One problem with the latter is that it would require TSOs to upgrade or install new meters at gas gates that are currently unmetered or oversized. There are 9 such meters and at an approximate average cost of $44,000 per upgrade, the benefit of carrying out the proposed rule changes is at least this avoided $396,000 cost.

Two other benefits that will come about as a result of this review are: reduced employee time spent dealing with exemptions; and improved allocative efficiency. Both of these benefits are difficult to quantify. However, based on the figures provided above, there would need to be a benefit of only $4,000 in reduced employee time across the industry for the proposals to break-even with the high bound cost estimate provided by the allocation agent. Given the process of apportioning UFG is essentially a zero-sum game, the allocative efficiency gained by implementing the proposals is likely to sum to zero. However, the global 1-month proposal itself has the potential to enhance overall efficiency if metering errors are detected and subsequently corrected as a result of certain gas gates changing to the G1M methodology.

Table 6. Summary of recommended rule changes

Issue	Assessment of benefit and costs	Regulatory objective met?		
		Fair	Efficient	Reliable
Atypical gas gates				
• Direct connect	Net benefit	✓		
• G1M	Net benefit	✓	✓	✓
• Unmetered/oversized	Net benefit	✓		
Correcting AUFG factors	Net benefit	✓		✓
Compliance related issues				
• Estimated data for TOU sites	Net benefit	✓		
• Trading notifications	Neutral	✓	✓	
Issues raised by the DRAG				
• Extend performance audits to registry	Net benefit	✓	✓	✓
• Audits following major system change	Neutral	✓		✓
• Rule 42 deletion	Net benefit	✓		

As the table shows, each proposed change in isolation ought to provide at least a neutral effect to the industry while each would meet the regulatory objective. The sum of these individual changes is expected to provide a net benefit.

11.2 Next steps

Submissions are welcome on this Statement of Proposal. Gas Industry Co will consider any submissions before making a Recommendation to the Associate Minister of Energy. The Associate Minister of Energy would have 90 days to consider the recommendation. Provided that the Minister gazetted the recommended rules, the 'go-live' date for the new rules would be one month after the gazetted date.