Discussion Paper

Reconciliation of Downstream Gas Quantities

11 January 2007

The Gas Industry Co was formed to be the co-regulator under the Gas Act. As such, its role is to:

- recommend arrangements, including rules and regulations where appropriate, which improve:
  - the operation of gas markets;
  - access to key infrastructure; and
  - consumer outcomes;
- administer, oversee compliance with, and review such arrangements; and
- report regularly to the Minister of Energy on the performance and present state of the New Zealand gas industry, and the achievement of Government's policy objectives for the gas sector.

Authorship

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1 Executive Summary

1.1 Accurate reconciliation is a key component of any effective gas market. Each participant needs to know how much gas is going into the system, who is taking what gas out and how much gas is unaccounted for.

1.2 In June 2006, Gas Industry Co released a discussion paper titled "*Options for Amending Allocation and Reconciliation Arrangements in the New Zealand Gas Industry"* (the "June Discussion Paper"). That paper discussed a number of problems with the current arrangements for both downstream reconciliation and upstream reconciliation.

1.3 This paper focuses on downstream reconciliation issues. In terms of upstream reconciliation issues, Gas Industry Co's analysis suggests it is premature at this stage to develop new upstream processes, largely due to legacy gas issues and the need for further clarification of how the pipeline balancing arrangements will be managed. It is currently envisaged that Gas Industry Co's review of upstream reconciliation arrangements will not begin until at least July 2008.

1.4 Downstream reconciliation information is used by the industry when calculating energy purchases and network charges. The focus of Gas Industry Co's review is improving the accuracy and integrity of downstream reconciliation information. Gas Industry Co's review will not specify how this information is subsequently used for financial settlements. However, it is acknowledged that improving the accuracy of downstream reconciliation information is likely to have some benefits in terms of financial settlement processes.

1.5 In terms of downstream reconciliation, the requirements of industry participants, the policy objectives in the Government Policy Statement on Gas Governance ("GPS") and Gas Industry Co's obligations under the Gas Act all point toward improvements being required. Given Gas Industry Co's obligations and powers, the "Regulatory Objective" of this review is:

"to recommend to the Minister by June 2007 arrangements for more efficient and accurate downstream allocation and reconciliation of gas quantities. Such arrangements should:

- *ensure the protocols and standards for reconciling and balancing downstream gas, and providing and disclosing of data and information, are safe, efficient, fair, and reliable;*
- *standardise data exchange protocols across the industry and ensure the correct data is communicated to all affected parties in a timely manner;*
- *provide for consistent, transparent, and enforceable processes;*
- *facilitate retail competition and ensure barriers to competition are minimised;*
- *establish more transparency of the full costs of balancing and reconciling gas; and*
- *provide for more accurate identification and fairer allocation of the amount of unaccounted for gas."*

1.6 Gas Industry Co adopted a comprehensive process to identify areas where the current downstream reconciliation arrangements are failing to appropriately meet the Regulatory Objective. In this paper, problems with downstream reconciliation arrangements have been grouped into the following "problem areas":

- Problem Area 1 – Information quality;
- Problem Area 2 – Allocation methodologies and UFG;
- Problem Area 3 – Appointment of Allocation Agent;
- Problem Area 4 – Governance; and
- Problem Area 5 – Audits and Compliance.

1.7 In sections 6 to 10 of this paper, Gas Industry Co considers each problem area in turn and discusses:

- what the June Discussion Paper said about the area;
- what submissions on the June Discussion Paper said;
- Gas Industry Co's further analysis of the area; and
- options or the preferred approach for delivering the Regulatory Objective.

1.8 The analysis in sections 6 to 10 indicates that Gas Industry Co's preferred approach for addressing these problem areas is to:

- implement a number of mandatory information quality measures;
- establish that the month end daily allocation service will be performed using a global methodology on all gas gates;
- allow for the appointment of a single downstream Allocation Agent by Gas Industry Co;
- mandate clear, transparent governance structures and related processes (e.g. amendment processes); and
- allow for the performance of audits, the establishment of a compliance regime and the ability in prescribed circumstances for Gas Industry Co to perform "special allocations".

A more detailed summary of the preferred approach for addressing the problem areas is provided in section 11 (the "proposed measures").

1.9 The proposed measures could theoretically be implemented under two different "policy instruments" i.e. either a pan-industry agreement or a regulatory arrangement. The "regulatory arrangement" would likely involve rules for technical reconciliation processes and regulations for compliance. In section 12, Gas Industry Co details the pros and cons of a regulatory arrangement and a pan-industry agreement. From this analysis, a regulatory arrangement appears to be most appropriate. However, Gas Industry Co intends to perform cost / benefit analysis and seek feedback from stakeholders before ruling out a pan-industry agreement.

1.10 Before Gas Industry Co could recommend a regulatory arrangement it must comply with section 43N of the Gas Act. This would require Gas Industry Co to prepare a statement of the proposal for consultation, which must include (amongst other things):

- a detailed statement of the proposal; and
- an assessment of the benefits and costs of all reasonably practicable options for achieving the objective of the regulation.

1.11 Gas Industry Co has started considering how it would structure a regulatory arrangement that covers the proposed measures. Gas Industry Co's current thinking on a possible framework for such a regulatory arrangement is attached as Appendix D.

1.12 As discussed in section 13, Gas Industry Co has engaged NZIER to consider how the benefits and costs of the proposed measures could be assessed. A paper from NZIER on a possible framework for such a cost / benefit analysis is attached as Appendix E. This paper includes questions for submitters in relation to information which will be of value for performing the actual cost / benefit analysis.

1.13 Finally, section 14 of the paper discusses next steps. Submissions on this paper are welcomed by 23 February 2007. Industry feedback is necessary to ensure that Gas Industry Co's policy development and analysis are optimal. To assist stakeholders prepare submissions, Gas Industry Co is planning on presenting the proposed measures to the industry at a presentation workshop on 25 January 2007. Also, Gas Industry Co intends to convene a meeting of the Gas Allocation and Reconciliation Team working group ("GART") mid March 2007 to discuss technical points arising from the submissions.

2 Background

Purpose

2.1 Reconciliation is a crucial part of an effective gas market. Industry participants need to know how much gas is going into the system, who is taking what gas out and how much gas is unaccounted for.

2.2 As reconciliation is a crucial element of the gas market, it is not surprising that Gas Industry Co is looking into reconciliation practices. This fits with Gas Industry Co's key strategic aim of improving the operation of gas markets and ensuring they operate in a safe, fair, efficient and reliable manner. Gas Industry Co is also considering reconciliation due to the policy requirements in the GPS and statutory requirements in the Gas Act (these are discussed in more detail in section 3).

2.3 The analysis performed to date suggests that current reconciliation practices are sub-optimal in a number of respects. There is the need and potential to develop reconciliation arrangements that meet Government's policy aims and better improve industry outcomes. The Regulatory Objective encapsulates these pivotal concepts.

2.4 A number of problems and potential solutions were presented in the June Discussion Paper. This paper further discusses the issues related to downstream reconciliation that were explored in that paper and presents the analysis Gas Industry Co has undertaken since that time. Five problematic areas are identified and possible solutions are assessed against the Regulatory Objective.

2.5 This paper is only intended to set out possible courses of action which Gas Industry Co may adopt in order to meet the Regulatory Objective and to seek feedback from stakeholders on the analysis performed to date. The Gas Act requires that, before Gas Industry Co recommends to the Minister any regulations and/or rules, formal consultation must be carried out, including an assessment that incorporates a cost-benefit analysis (see sections 43L and 43N of the Gas Act). This paper is not intended to be that formal consultation.

Scope

2.6 This paper highlights five problem areas where Gas Industry Co has suggested that the current downstream reconciliation arrangements need to be improved in order to meet the Regulatory Objective. There are also some matters where Gas Industry Co does not consider changes are required to meet the Regulatory Objective (for example, the categories of end users). Any new regime will need to make provision for these matters, in addition to the proposed measures for addressing the five problem areas.

2.7 There are a variety of matters that Gas Industry Co considers are outside the scope of its current review, for example:

- commercial arrangements that rely on reconciliation information (including charges for gas trading and transmission); and
- upstream reconciliation arrangements.

2.8 The June Discussion Paper discussed a number of upstream reconciliation issues. Gas Industry Co's analysis of these issues suggests it is premature at this stage to develop new upstream processes, largely due to legacy gas issues and the need for further clarification of how the pipeline balancing arrangements will be managed. Accordingly, upstream reconciliation is not discussed in this paper and has been excluded from the reconciliation review at this time. It is expected that Gas Industry Co will be able to consider upstream reconciliation issues in the future, as legacy gas issues diminish and the pipeline balancing arrangements become clear.

2.9 Gas Industry Co plans to keep a "watching brief" and initiate further reviews of reconciliation in the future. It is currently envisaged that Gas Industry Co's review of upstream reconciliation arrangements will not begin until at least July 2008.

2.10 Given the exclusion of upstream reconciliation, it is important that any downstream reconciliation measures designed at this time take into account the possibility that further changes will be required in the future. As such, consideration will be given in this review to issues that affect the interface between downstream and upstream.

2.11 The exclusion of any matters on the basis that they are outside the scope of the current review should not be taken as an endorsement of the current practices.

Process to date

2.12 Gas Industry Co's review of the current downstream reconciliation arrangements was initiated following feedback received from both the Switching and Registry Working Group ("SRWG") and industry participants.

2.13 The Gas Allocation and Reconciliation Team ("GART") was established to assist Gas Industry Co review downstream allocation and reconciliation issues. The Wholesale Market Working Group (WMWG) and Tom Tetenburg and Associates Ltd (the industry's nominated Allocation Agent), have also been involved in discussions on potential improvements.

2.14 In addition, Gas Industry Co has engaged NZIER to design a framework for a cost/benefit analysis of the reasonably practicable options. This framework is discussed further in section 13 of this paper and attached as Appendix E.

2.15 Thus, the review of downstream reconciliation arrangements undertaken by Gas Industry Co to date has included:

- numerous meetings of the GART and discussions with other industry stakeholders, such as Tom Tetenburg and Associates Ltd;
- releasing the June Discussion Paper;
- consideration of the submissions received on that paper. A summary of those submissions is attached as Appendix B;
- analysis of the preferred approach for addressing downstream reconciliation issues and considering a possible framework for delivering the proposed measures in a regulatory arrangement; and
- engaging NZIER to design a cost / benefit analysis framework.

Linkage with other work streams

2.16 Downstream reconciliation is linked to other work streams being reviewed by Gas Industry Co. In particular:

- *Transmission Open Access* - Upstream reconciliation issues have been canvassed in Gas Industry Co's Transmission Open Access work stream. Upstream reconciliation issues were also discussed in the June Discussion Paper. As noted in paragraphs 2.7 to 2.10, Gas Industry Co has decided it would be premature to consider upstream reconciliation issues as part of this review.
- *Switching and Registry* – In the Switching and Registry work stream, Gas Industry Co's view is that a central registry should be established. The establishment of this registry will affect the quality and processes of downstream allocation. This is discussed, where relevant, in section 6 of this paper.
- *Wholesale markets* – In the event that the establishment of a wholesale market required changes to the downstream allocation and reconciliation regime, Gas Industry Co will consider any such changes at the time of making any such wholesale markets proposal.
- *Emergency arrangements* – In an emergency, gas use may be different from expected. The emergency arrangements work stream may put in place arrangements whereby during an emergency retailers can be directed to cease supplying certain customers gas. Information on downstream gas flows (including reconciliation information) will be necessary to determine what happened during an emergency event. Accordingly, the reconciliation arrangements will need to provide for certain information requests and disclosure following an emergency.

Terminology

2.17 As a general rule, Gas Industry Co has endeavoured to adopt standard gas industry terminology for reconciliation. For convenience, terms and abbreviations commonly used in this paper are recorded in Appendix C.

2.18 Gas Industry Co acknowledges that consistency of terminology is important. Where possible gas codes, industry agreements, rules and regulations should use consistent terminology. It is also sensible to achieve reasonable consistency between gas and electricity, where appropriate. Submissions are welcomed on whether appropriate terminology is adopted by Gas Industry Co in this Discussion Paper and attached Appendices.

2.19 There are two key terminology points worth clarifying:

- the use of the terms "allocation" and "reconciliation"; and
- the difference between "upstream" and "downstream".

Definitions of "allocation" and "reconciliation"

2.20 As discussed at page 2 of the June Discussion Paper:

- *"Allocation"* refers to the process of determining (especially at the end of the month) the gas quantities for which individual parties are responsible; and

- *"Reconciliation"* refers to the processes that follow allocation that are designed to verify the reasonableness of the allocation, and to determine whether any issues identified are material and warrant financial adjustment.

2.21 However, often (in industry and in this paper) the term "reconciliation" is used to refer to the whole process of allocation and reconciliation. In effect, the arrangements for downstream reconciliation discussed in this paper propose "reconciliation" consisting of a series of "allocations".

2.22 The Gas Act and GPS only refer to reconciliation and not allocation (specifically the Gas Act refers to "reconciling and balancing gas" and "reconciling market transactions", and the GPS to "reconciliation"). The meaning of a statutory term is ascertained from its text and its purpose. In this area, it is clear that the use of the term "reconciliation" refers to the whole downstream reconciliation regime, including allocations.

Definitions of "downstream" and "upstream"

2.23 In this paper:

- "*downstream*" reconciliation refers to allocation and reconciliation of gas transferred at "gas gate stations" where the high pressure transmission pipelines interconnect with low pressure distribution pipelines or major end users. Downstream reconciliation determines the quantity of gas delivered by each transmission shipper to the gas gate, the quantity of gas for which each retailer on the distribution network is responsible and any UFG; and

- *"upstream"* reconciliation refers to allocation and reconciliation of gas transferred at "gas transfer points" where gas enters the transmission pipeline. The gas transfer points are mostly points of interconnection between the Maui and Vector pipelines. As noted above, arrangements for "upstream reconciliation" are not covered in this paper.

Q1:	*Do you agree with the definitions adopted by Gas Industry Co in this Discussion Paper? If not, what do you suggest?*

3 Regulatory Objective

The Gas Act and GPS

3.1 In determining the objective of this downstream reconciliation review, Gas Industry Co must take into account the purposes and objectives stated in the Gas Act and the GPS.

Purposes in the Gas Act

3.2 Section 43F of the Gas Act provides that regulations may be made for all or any of the purposes specified in section 43F(2). These purposes include:

> *"(2) The purposes are –*
>
> Wholesale gas market
> (*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:*
>
> *…*
>
> Transmission and distribution of gas
> *(c) prescribing reasonable terms and conditions for access to transmission or distribution pipelines: …"*

3.3 If Gas Industry Co decides to recommend regulations or rules, under section 43ZN its objectives in making such a recommendation are:

> *"(a) the principal objective is to ensure that gas is delivered to existing and new customers in a safe, efficient, and reliable manner; and*
>
> *(b) the other objectives are –*
>
> *(i) the facilitation and promotion of the ongoing supply of gas to meet New Zealand's energy needs, by providing access to essential infrastructure and competitive market arrangements:*
>
> *(ii) barriers to competition in the gas industry are minimised:*
>
> *(iii) incentives for investment in gas processing facilities, transmission, and distribution are maintained or enhanced:*
>
> *(iv) delivered gas costs and prices are subject to sustained downward pressure:*

(v) risks relating to security of supply, including transport arrangements, are properly and efficiently managed by all parties:

(vi) consistency with the Government's gas safety regime is maintained."

3.4 In terms of downstream reconciliation, the stated purposes in section 43F of the Gas Act are referenced to the "wholesale gas market" and "reasonable terms and conditions for access to distribution pipelines". Gas Industry Co considers that in order for it to consider effectively whether regulations and rules are required for the purposes specified in section 43F it is necessary to consider the entire downstream reconciliation regime. If Gas Industry Co does consider it appropriate to recommend rules or regulations in relation to downstream reconciliation, such rules or regulations may cover the full scope of downstream reconciliation (as such scope would be necessary in order to achieve the purposes specified in section 43F).

General objectives and outcomes in the GPS

3.5 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, Gas Industry Co must have regard to the GPS objectives and outcomes when making recommendations for gas governance rules or regulations.

3.6 As discussed in section 4, to ensure sound policy development Gas Industry Co prefers to assess all available options against the GPS objectives, even though the Gas Act does not prescribe the process that must be followed if a preferred option can be implemented without rules or regulations.

3.7 The Government's overall policy objective for the gas industry, as stated in the GPS, is:

"To ensure that gas is delivered to existing and new customers in a safe, efficient, fair, reliable, and environmentally sustainable manner."

3.8 Paragraph 5 of the GPS adds that, consistent with this overall objective, the Government is seeking certain specific outcomes which include:

"(a) The facilitation and promotion of the ongoing supply of gas to meet New Zealand's energy needs, by providing access to essential infrastructure and competitive market arrangements;

(b) Energy and other resources are used efficiently;

(c) Barriers to competition in the gas industry are minimised to the long-term benefit of end-users;

(d) Incentives for investment in gas processing facilities, transmission and distribution, energy efficiency and demand-side management are maintained or enhanced;

(e) The full costs of producing and transporting gas are signalled to consumers;

(f) Delivered gas costs and prices are subject to sustained downward pressure;

…

(h) Risks relating to security of supply, including transport arrangements, are properly and efficiently managed by all parties;

…

(j) The gas sector contributes to achieving the Government's climate change objectives by minimising gas losses and promoting demand-side management and energy efficiency."

Specific allocation and reconciliation objectives in the GPS

3.9 Paragraph 9 of the GPS specifically deals with industry-led solutions and, in relation to reconciliation, states:

> *"The Government expects the industry body to develop and submit to the Minister of Energy for approval proposed arrangements, including regulations and rules where appropriate, providing for effective industry arrangements in the following areas.*
>
> **Wholesale Markets and Processing**
>
> - *The development of protocols and standards applying to wholesale gas trading, including quality standards, balancing and reconciliation.*
>
> *…*
>
> **Transmission and Distribution Networks**
>
> - …
> - *The establishment of consistent standards and protocols across distribution pipelines so that gas market participants can access distribution pipelines on reasonable terms and conditions.*
> - *The establishment of gas flow measurement arrangements to enable effective control and management of gas."*

Timeframes

3.10 The GPS sets the date for delivery of reconciliation arrangements as 31 March 2005. However, Gas Industry Co has, on behalf of the industry, agreed with the Minister of Energy to extend this deadline. The new dates for delivery are set out in Gas Industry Co's Strategic Plan for 2007 – 2009, as follows[1]:

[1] See page 15 of the Strategic Plan.

Table 1: Key reconciliation strategic milestones

Activity	Milestone
• Implement short-term reconciliation fixes.	• Revised Gas Transfer Code and Reconciliation Code operational by September 2006.
• Develop proposal on long-term reconciliation arrangements.	• Issue consultation document on proposed reconciliation arrangements by December 2006.
• Prepare recommendation on reconciliation arrangements.	• Recommendation on efficient arrangements to the Minister by June 2007.

3.11 The Gas Industry Co's analysis in the June Discussion Paper identified a number of aspects of the current regime which are problematic.

3.12 Based on the complexity of the downstream issues, it was apparent that it was not possible to implement "short-term" reconciliation fixes by way of industry agreement to the Reconciliation Code by September 2006. In its July – September 2006 quarterly report, Gas Industry Co advised the Minister that it was inappropriate to implement the changes envisaged by the September 2006 milestone and that Gas Industry Co intends to limit the recommendations due by June 2007 to efficient downstream arrangements.

Definition of "Regulatory Objective"

3.13 Given the obligations and powers under the Gas Act and the GPS, the objective of this review (the "Regulatory Objective") is:

"to recommend to the Minister by June 2007 arrangements for more efficient and accurate downstream allocation and reconciliation of gas quantities. Such arrangements should:

- *ensure the protocols and standards for reconciling and balancing downstream gas, and providing and disclosing of data and information, are safe, efficient, fair, and reliable;*
- *standardise data exchange protocols across the industry and ensure the correct data is communicated to all affected parties in a timely manner;*
- *provide for consistent, transparent, and enforceable processes*;
- *facilitate retail competition and ensure barriers to competition are minimised;*
- *establish more transparency of the full costs of balancing and reconciling gas; and*
- *provide for more accurate identification and fairer allocation of the amount of unaccounted for gas."*

3.14 This paper aims to identify reasonable practicable options for achieving the Regulatory Objective. Gas Industry Co is aiming to recommend by June 2007 arrangements that it considers would, if implemented, achieve the Regulatory Objective.

3.15 Gas Industry Co believes achievement of the Regulatory Objective is a first step towards achieving the reconciliation objectives in the Gas Act and the GPS. Gas Industry Co will maintain a watching brief on reconciliation issues to consider whether future steps are required in order to fully achieve the reconciliation objectives in the Gas Act and GPS. At the current time, Gas Industry Co expects that a further review will be required, when appropriate, of upstream reconciliation arrangements.

Q2: *Do you agree with the proposed Regulatory Objective for downstream reconciliation? If not, what do you think would be a more appropriate regulatory objective?*

4 Assessment Framework

Scoping the problem areas

4.1 With any review the first critical aspect is identifying where problems currently arise. The Gas Industry Co adopted a comprehensive process to identify areas where the current downstream reconciliation regime is failing to appropriately deliver industry requirements. The steps taken by Gas Industry Co to date are summarised at paragraphs 2.12 to 2.15. Industry comment has been welcomed, including through the GART and the submissions received on the June Discussion Paper.

4.2 Numerous problems with the current downstream arrangements have been identified. In this paper, these problems have been grouped into five "problem areas". The Gas Industry Co considers that in relation to each of these areas the current arrangements are not meeting the Regulatory Objective. The areas are:

- Problem Area 1 – Information quality[2];
- Problem Area 2 – Allocation methodologies and UFG[3];
- Problem Area 3 – Appointment of Allocation Agent;
- Problem Area 4 – Governance; and
- Problem Area 5 – Audits and Compliance.

4.3 Many of the issues in relation to each problem area were discussed in the June Discussion Paper. However, as Gas Industry Co's analysis has progressed since June 2006, the "problem areas" discuss some new issues and the discussion is presented in a different order.

4.4 In sections 6 to 10, Gas Industry Co considers each problem area in turn. Each section details:

- what the June Discussion Paper said about the area;
- what submissions on the June Discussion Paper said;
- Gas Industry Co's further analysis of the area; and
- options or the preferred approach for delivering the Regulatory Objective.

Framework for analysis

4.5 Before making a recommendation to the Minister to regulate or make rules, section 43N of the Gas Act requires Gas Industry Co to (among other things):

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[2] In the June Discussion Paper this was discussed under the headings "Issue 4 – Misalignment between month end and reconciled consumption data for non-TOU sites" and "Issue 5 – Data quality".

[3] In the June Discussion Paper this was discussed under the heading "Issue 2 - Inequitable allocation of UFG variations to the incumbent retailer".

- seek to identify all reasonably practicable options for achieving the objective of the regulation or rule;
- assess those reasonably practicable options by considering:
  - the benefits and costs of each option;
  - the extent to which the objective would be promoted or achieved by each option; and
  - any other matters that Gas Industry Co considers relevant; and
- ensure that the objective of the regulation or rule is unlikely to be satisfactorily achieved by any reasonably practicable means other than the making of the regulation or rule (for example, by education, information, or voluntary compliance).

4.6 While the Gas Act does not prescribe the process that must be followed if a preferred option can be implemented without rules or regulations, Gas Industry Co prefers to use the same process for assessing all available options. This approach ensures that policy development is soundly based irrespective of the means by which that policy is delivered.

4.7 Accordingly, the approach taken in this paper is to identify reasonably practicable options to achieve the Regulatory Objective, to analyse the relative merits of the reasonably practicable options and to present the preferred options for consultation.

Assessment process

4.8 Given the complexity and interrelatedness of downstream reconciliation issues, it was important for Gas Industry Co to establish a process for considering the issues in a systematic way.

4.9 First, section 5 of this paper summarises the current downstream reconciliation arrangements. Then sections 6 to 10 of this paper discuss each of the five problematic areas in turn. Each section explores possible options for addressing the area and assesses those options against the Regulatory Objective. This analysis is essentially a screening exercise, as it would be inefficient for further analysis (e.g. cost / benefit analysis) to be performed on options which are incapable of meeting the Regulatory Objective. The preferred approach for addressing each of the problem areas is summarised in section 11.

4.10 Gas Industry Co's view is that, to properly take account of the interdependence of the issues, it is necessary to consider the downstream reconciliation regime as a whole. The key difference between the two potentially reasonable regimes identified turns on the type of policy instrument adopted (i.e. a regulatory arrangement or a pan-industry agreement). Section 12 analyses a number of factors relevant to the choice of policy instrument.

4.11 The analysis in section 12 suggests that a regulatory arrangement is likely to be more appropriate than a pan-industry agreement. Appendix D details how a regulatory arrangement may be structured and its potential scope. However, Gas Industry Co intends to perform a cost / benefit analysis and seek further submissions from stakeholders before ruling out a pan-industry agreement. Section 13 attaches as

Appendix E a framework for such a cost / benefit analysis that has been prepared by NZIER.

4.12 Gas Industry Co considers that this multi-tiered assessment process ensures identification of the reasonably practicable options for a downstream reconciliation regime as efficiently as possible.

5 Current arrangements for downstream reconciliation

5.1 The June Discussion Paper detailed in some length the current downstream reconciliation arrangements in section 4 of that paper. Accordingly, this paper only summarises the key processes and findings, rather than canvassing each issue in detail.

5.2 In summary:

- The current downstream reconciliation processes are detailed in the Reconciliation Code, but are given legal effect through allocation agreements and other contracts. Also, the parties may contractually agree different reconciliation processes.
- There are currently 124 gas gates, of which 93 require reconciliation functions to be performed. The 93 gas gates supply distribution networks owned and operated by Vector (56), Powerco (32) and GasNet (5). The vast majority of shared gas gates (i.e. gas gates for which more than one retailer is active) currently use a difference method of allocation, although a handful use a global method of allocation[4]. In terms of the gas gates using the difference method, Genesis is the retailer with the greatest level of incumbency (50 gas gates), followed by Contact (20 gas gates), Wanganui Gas (3 gas gates) and NGC Retail (2 gas gates).
- The Reconciliation Code specifies six allocation groups based on the availability of metering information, annual consumption and whether the end user site has certain approved profiles[5] (e.g. static deemed profile or dynamic deemed profile). However, Gas Industry Co understands in practice the Allocation Agent only receives information on three allocation groups (i.e. group 2 (TOU metering without telemetry), group 4 (meters read at or close to month end with RPR/receipt point residual profile) and group 6 (meters read other than month end with RPR profile)).
- The Reconciliation Code includes provisions for two main allocation methodologies, difference and global. The choice of methodology is left to the parties at the gas gate to determine in the allocation agreement. Where an allocation agreement is being negotiated and the parties are unable to reach agreement, the Allocation Agent can determine the allocation methodology having regard to the core principles in the Reconciliation Code. Where the difference method is adopted, the allocation agreement usually allows the incumbent retailer to change at its discretion to the global method from the beginning of a month.

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[4] Essentially, the global method requires all retailers to provide to the Allocation Agent consumption information and the total consumption across all retailers is then scaled up or down so that the total for all customer connections equals the quantity metered at the gas gate. However, under the difference method the allocated quantities of the incumbent retailer are calculated by the difference between the gas gate metered quantity and the aggregate quantities of the other retailers after loss factor adjustment.

[5] A profile can be approved where there is a high degree of confidence that the profile will reflect the daily consumption. For example, if a customer only consumed gas on Wednesdays then an annual profile may be approved that only allocated gas to that customer on Wednesdays in that year.

However, Gas Industry Co understands that where incumbents have tried to change the methodology they have often received significant push-back from other industry participants.

- The gas gates currently using a "global" method of allocation use a variation of the global method specified in the Reconciliation Code (i.e. the "1 month UFG method" is used). Essentially, the 1 month UFG method spreads UFG over all allocation groups (including groups using TOU devices), whereas the global method in the Reconciliation Code does not allocate any UFG to TOU devices.
- Three separate allocation services are covered by the Code: day end estimated energy information service (where the information need not be of billing quality); month end daily energy allocation service (where the information is of billing quality); and month end monthly energy allocation service. Month end daily energy allocation service is by far the favoured allocation service.
- The reconciliation year runs from 1 October through to 30 September. The Reconciliation Code states that the Allocation Agent will perform an annual reconciliation in October each year (to verify the reasonableness of the estimating methodology and resulting estimates used in any allocation during the previous 12 months). However, in practice, "corrections" can occur many, many months after this reconciliation. There is no clear, transparent process for the performance of corrections.
- Currently only one entity within New Zealand is offering allocation and reconciliation services (Tom Tetenburg and Associates Ltd). However, appointment of the Allocation Agent and execution of allocation agreements can be difficult. Appointment for the reconciliation year beginning 1 October 2006 was very problematic, with retailers failing to reach unanimous agreement.
- Part B of the Reconciliation Code sets out industry agreed arrangements for customer transfers between competing retailers. The Gas Industry Co has reviewed these arrangements in its switching work stream.

5.3 Although a variety of allocation and reconciliation arrangements are possible under the Reconciliation Code, the most common arrangement for a shared gas gate is a month end daily energy allocation service using the difference allocation methodology.

6 Problem Area 1 – Information quality

6.1 Effective allocation and reconciliation relies on accurate and reliable information. All downstream participants need accurate information about downstream gas flows. Also, since upstream shippers may rely on downstream reconciliation information to maintain a balanced position on the transmission system, there is added need for accurate downstream allocation and reconciliation data.

6.2 Information quality is the largest problem area identified by Gas Industry Co and involves a mix of technical issues (e.g. meter accuracy), process issues (e.g. timeframes) and issues related to governance and compliance (e.g. Who must provide information? Who should have access to information?).

6.3 Some of the measures discussed in this section were discussed in the June Discussion Paper and others have been incorporated into the review as a result of industry submissions and further analysis. Also, some issues discussed in the June Discussion Paper as "long term measures" have now (based on feedback received) been incorporated within the scope of this review.

What the June Discussion Paper said about this area

6.4 In terms of information quality, the June Discussion Paper focused on two issues, namely "Misalignment between month end and reconciled consumption data for non-TOU sites" and "Data quality". The June Discussion Paper also discussed the problems resulting from the use of inaccurate loss factors.

6.5 Text from the June Discussion Paper that relates to a particular information quality issue is referenced, where appropriate, in the discussion below.

What submissions on the June Discussion Paper said

6.6 Submitter responses to the question "to what extent do industry problems arise as a result of poor quality data supplied to the allocation process" indicated that data quality is a major issue. Numerous problems were discussed and many suggestions proposed. For ease of analysis, submissions related to specific data quality issues are presented in relation to the relevant discussion below.

6.7 However, one general comment is worth noting here, as it relates to numerous information quality issues. Genesis stressed that Gas Industry Co should not take too prescriptive an approach to solving data quality issues:

"As a general principle, Genesis Energy considers that the Gas Industry Company should not focus on how *retailers undertake their business operations, but should instead be strongly focused on ensuring that the right outcome – that of ensuring that high quality data is being submitted into the reconciliation process – is being achieved. This provides retailers with the appropriate incentive to innovate in their operational practices while achieving the desired outcome. Focusing on prescriptive approaches reduces the scope for innovative practices by requiring all retailers to do this same thing. This in turn reduces the point of difference on which retailers can compete.*

Whether to focus on achieving an outcome, or enforcing a common input practice can only really be determined by the factual circumstances of the situation and the relative level of risk involved in each.

Genesis Energy's current assessment of which path to take is that the risks of focusing on the delivery of the outcome is too high given the lack of maturity of the gas industry, relative to say the electricity industry where the outcome focus is about to be adopted in its new reconciliation process. Having said that, the Gas Industry Company should remain open, at some later stage, to assessing the merits of an outcome-focused approach."

6.8 Gas Industry Co agrees that it is important for the development of any new arrangements to allow for innovation and not be overly prescriptive. The Regulatory Objective acknowledges this by requiring arrangements that facilitate retail competition.

6.9 However, the introduction of information quality measures need not stifle innovation. The aim should be to encourage competition on the terms and quality of service, not on the basis of how creative a participant is at collecting or managing data.

6.10 It is important to bear in mind the scale of the current problem. Gas Industry Co understands from informal discussions that current UFG rates are untenable and unrealistic. Apparently, some gas gates have been allocated UFG as high as +13% and as low as -10%. If these figures are accurate it is deeply concerning. More likely, these figures are not accurate and indicate major flaws in the information being used in the allocation process.

6.11 Accurate reconciliation is a crucial part of a functional and competitive gas market. Gas Industry Co understands from informal discussions that some retailers are not competing for customers in certain areas due to concerns about the reconciliation regime.

6.12 Industry submissions and common sense dictate that improvements in information quality need to be a key driver of any arrangements proposed by Gas Industry Co. So, while it is important to not overly restrict business practices, there are instances where the adoption of a prescriptive approach is justified.

Framework for Gas Industry Co's further analysis

6.13 There are significant problems with information quality that permeate the whole downstream reconciliation regime. For the purpose of performing further analysis, Gas Industry Co has grouped the issues with quality and accuracy of information as follows:

Table 2: Issues with information quality

Broad issue	Specific problems
Inputs used in the allocation process	• Lack of standardised file formats and data requirements • Inconsistent estimation methodologies • Issues regarding the use of metering devices • Irregular updating of loss factors across distribution networks

Broad issue	Specific problems
Quality and reliability of allocation information	• Inadequate timeframes • Customer switching and lack of a central registry • Lack of effective incentives to provide accurate information and lack of mandatory performance criteria
"Wash-ups" and corrections	• "Wash-up" timeframe inappropriate • Ad hoc corrections problematic
Transparency	• Lack of transparency / too much confidentiality

Note: The limited ability to audit information and lack of transparent audit processes also affect the quality of information. Audits are discussed in section 10.

6.14 The specific problems in Table 2 are each discussed in more detail below. For each issue the discussion summarises what the June Discussion Paper said about the issue, how submitters have responded, Gas Industry Co's further analysis and the options / preferred approach for delivering the Regulatory Objective.

6.15 In terms of the options / preferred approach for delivering the Regulatory Objective, it is important to bear in mind that the options / preferred approach represents Gas Industry Co's current view on appropriate measures based on the current state of the industry and visibility of information difficulties. Gas is a dynamic industry and it will be necessary to assess whether any arrangements put in place remain sensible and sufficient. Accordingly, Gas Industry Co considers any new reconciliation arrangements should include a clear amendment process which allows appropriate opportunity for industry consultation.

6.16 Further, there may be instances where participants will legitimately require some time to modify their systems to be able to comply with any new information quality requirements and occasions where participants should be exempt from certain provisions. This means that transitional provisions and provisions allowing the granting of exemptions should also be included in any new reconciliation arrangements.

Further analysis on inputs used in the allocation process

6.17 Input difficulties mainly arise due to the varied nature of end users and the fact that it would be inefficient for all meters to be read simultaneously at the same time each month. The inability for all metering devices to be read each month, means that the allocation process must allow for provision of estimated information for certain groups of end users.

6.18 As noted above, the key problems with allocation inputs are:

- lack of standardised file formats and data requirements;
- inconsistent estimation methodologies;
- issues regarding the use of metering devices; and

- irregular updating of loss factors across distribution networks.

Lack of standardised file formats and data requirements

What the June Discussion Paper said

6.19 Paragraph 8.28 of the June Discussion Paper noted that:

"Data quality issues are exacerbated by the lack of a standardised format for submitting data to the allocation agent. At present, the allocation agent receives data in multiple formats from multiple sources. This makes it more likely that errors will occur in the allocation process. The Gas Industry Co considers that data transferred and submitted between all parties should be subject to a standardised data transfer format. However, at this stage the Gas Industry Co considers that these standards are a longer term issue that should be resolved only after the initial changes have been made to allocation and reconciliation arrangements. A draft Gas Information Exchange Protocol (GIEP) has been compiled by the industry although this requires further development and is not likely to be completed in the short term. However, the Gas Industry Co considers it important to also progress further work in this area."

6.20 The June Discussion Paper invited submitters to comment on whether it would be appropriate in the longer term to introduce a standardised data transfer format.

What submissions on the June Discussion paper said

6.21 All nine of the submissions supported the introduction of a standardised data transfer format. Four of the submissions suggested that this is a short term issue, rather than a long term issue. Other relevant comments in the submissions noted that:

- the upstream standards for the exchange of data which have been adopted for OATIS and are available at www.gas.org.nz may be a useful precedent;
- the Reconciliation Code working group was unable to decide on the information to be contained within the files or on the format of the files. A non involved third party such as the Gas Industry Co would be an ideal party to develop the file formats;
- if the industry pursues developments such as global reconciliation, wash-ups, seasonal residual profiles, and meter reading performance reports then standard formats will be important given the increased frequency and volumes of data being transmitted;
- the current Allocation Agent (Tom Tetenburg and Associates Ltd) noted that, while the introduction of standardised data transfer formats is a good idea, the number of errors introduced via the non-standard formats has to date been minor; and
- the purpose of the GIEP (which are the gas equivalent of the electricity EIEP protocols) is to facilitate the transmission of data between retailers. However, there is no reason the protocols could not be used to transmit data between retailers and the Allocation Agent, and from the Allocation Agent to distributors.

Further analysis on standardised file formats and data requirements

6.22 In response to submissions, Gas Industry Co considers that it is appropriate for this issue to be considered as part of this review, rather than left for a longer term review. The current arrangements do not appear to be meeting the Regulatory Objective. In particular, the current arrangements do not "standardise data exchange protocols across the industry and ensure the correct data is communicated to all affected parties in a timely manner".

6.23 Given the overwhelming support and the apparent benefits from standardisation, development of standardised file formats appears to be a "no brainer", provided cost is appropriate.

6.24 Development of standardised file formats is a technical issue which will require industry input. Industry feedback will ensure any standardised file formats contain all of the necessary information, without introducing unnecessary complexity or transactional costs.

6.25 It is likely that standardised file formats may take some time to develop and that the formats will need to be reviewed over time to keep pace with industry changes. Reaching industry consensus on file formats may be unrealistic. Also, the required content of any standardised file format will likely become clearer once other issues regarding allocation are specified.

6.26 To achieve the Regulatory Objective Gas Industry Co believes that it will be necessary:

- for the development and review of the arrangements to allow for industry input (but ensure unanimous agreement is not required);
- to ensure the process for review allows for changes to occur quickly (i.e. without requiring a rule change or pan-industry agreement); and
- to ensure that the standardised file formats are readily available.

6.27 In designing a regime that achieves these factors, Gas Industry Co considers it useful to draw on electricity industry experience (and, in particular, the structure of the Electricity Standing Data Formats Group). Accordingly, Gas Industry Co's preferred approach is to develop a Gas Data Formats Group which will be tasked with developing and maintaining appropriate standardised file formats.

6.28 To overcome any problems obtaining unanimous agreement, file formats and changes approved by a majority of the Gas Data Formats Group would be forwarded to the Board of Gas Industry Co for approval. It is anticipated approval will usually occur as a matter of course. However, the Board should be required to consider whether the proposed file format or change is material enough to justify the performance of a cost/benefit analysis (for example, if a party will face large compliance costs). Also, before this proposed process could be included in a

regulatory arrangement it will be necessary to confirm that approval of standardised file formats is a power that can be delegated to Gas Industry Co.[6]

6.29 Once approved, Gas Industry Co would publish the standard file formats (or changes) and the date on which the formats (or changes) take effect on its website.

6.30 Under this proposed structure, any downstream reconciliation arrangements will need to require participants to comply with the standard file formats (if any) published on Gas Industry Co's website.

Options / Preferred approach for delivering the Regulatory Objective

6.31 Gas Industry Co's preferred approach to better meet the Regulatory Objective is:

- to establish a Gas Data Formats Group to develop, and later review (as and when appropriate), standardised file formats and forward to Gas Industry Co for approval and publication; and
- for downstream reconciliation arrangements to require participants to comply with the standard file formats (if any) published on Gas Industry Co's website.

Q3:	*Do you agree with Gas Industry Co's preferred approach towards standardised file formats? If not, how should it be improved?*

Inconsistent estimation methodologies

What the June Discussion Paper said

6.32 The June Discussion Paper explained some of the current inconsistent estimation methodologies and a potential proposal for addressing this as follows:

"8.18 Where quantities for sites in allocation groups 3 and 4 are deemed *to align with the allocation month (the meter readings for the site may not align exactly with the start and finish of each calendar month), there may be some inaccuracy introduced. In addition, where retailers adjust quantities for sites in allocation groups 3 and 4 to reflect the exact calendar month, forward estimates need to be made for the appropriate adjustment. For allocation groups 5 and 6, the retailer will need to use some forecasting techniques to estimate monthly energy use by that group. Wherever estimates are required, there may be an incentive on retailers to make these estimates based on a flatter seasonal profile than reality would otherwise suggest. This approach could reduce transmission overruns, reduce Balancing and Peaking Pool liabilities, and may also have an impact on the accuracy of wholesale gas settlements (particularly with the expected increase in the importance of capacity pricing in new wholesale gas contracts).*

…

8.20 One proposal is to require quantities to be "normalised" so that they reflect consumption in the calendar month (rather than reflecting consumption in the period between two reads that coincides roughly with the calendar month). This proposal requires the Gas Industry Co to establish a mandatory formula and revision cycle for

[6] The ability at law to delegate decisions and roles to Gas Industry Co will also need to be considered in relation to other measures proposed in this paper.

seasonally adjusted read-read estimates (historic read-read estimates) to replace initial estimates (forward estimates).”

6.33 The June Discussion Paper asked submitters to comment on whether Gas Industry Co should establish accuracy criteria for estimates (in conjunction with an appropriate compliance regime) and whether it is appropriate to introduce a requirement that submitted data contains a minimum percentage of historic read data.

What submissions on the June Discussion Paper said

6.34 Submitters agreed that Gas Industry Co should establish accuracy criteria for estimates or develop this issue further for industry comment. At least two submitters (Contact and Wanganui Gas) noted that Gas Industry Co should go further and mandate an estimating process.

6.35 In relation to the creation of an estimating process:

- the current Allocation Agent (Tom Tetenburg and Associates Ltd) noted that normalising data might improve data quality, or it may just complicate matters further;
- Wanganui Gas and Contact supported the introduction of a mandatory formula. Contact noted that:

  “…This natural misalignment of the read-read period with the calendar month can result in errors of up to +/- 6.7%.

  For group 5-6 sites there is no mandatory formula for production of monthly estimates, and even if there was it would be unlikely to produce estimates materially aligned with actual deliveries due to the need to estimate forward for substantial periods for many of the contributing ICPs.

  To achieve material alignment between allocations and deliveries for [non daily metered] sites, Contact considers that there should be a revision process and mandatory formula for allocating actual read-read energy quantities to the days in between by applying a seasonal shape. …”

- Contact further thought that initial allocation quantities should be based on estimated deliveries for the calendar month produced shortly after month end, which should be 100% forward estimates;
- Powerco noted that *“due to the spectrum of data provided it is impossible to state with certainty what the underlying source of the data is. Thus it is likely the Allocation Agent is unknowingly receiving both normalised and as billed data at present”*;
- Mighty River Power submitted *“The current allocation system forces retailers to submit their volumes on an “As Billed” basis which can vary by 20% from the final calculated volumes for a consumption month. This is especially the case in the months when large seasonal swings in consumption occur”*; and
- Nova believes that seasonal residual profiles should be introduced as a requirement where a retailer does not read a site’s meter at or near month end. *“Seasonal residual profiles would serve a similar function as “Q files” in the electricity industry and would support retailers who desire to read customer*

meters infrequently and at times other than at month end without impacting on accuracy of reconciliation".

Further analysis on estimation methodologies

6.36 The problems caused by estimation routines are greatest in relation to allocation groups 5 and 6 where meter reads occur infrequently. Estimation issues do not arise for allocation groups 1 and 2 where daily metered information is provided. Some estimation/normalisation issues occur (with deemed alignment) for allocation groups 3 and 4, but the extent of errors is unlikely to be as great as groups 5 and 6. This is because estimation errors for groups 3 and 4 sites are likely to be dampened due to the requirement for these meters to be read at or close to the month end.

6.37 Gas Industry Co understands that on average group 5 and 6 sites contribute to roughly 25% of the load at an average gas gate and groups 3 and 4 contribute on average to a further 25%. However, for any given gas gate the actual load split may differ greatly.

6.38 Contact indicated that in relation to groups 3 and 4 the misalignment of the read-read period with the calendar month can result in errors of up to +/- 6.7%. The potential scope for an error between the actual and estimated usage is much larger in relation to allocation groups 5 and 6. Mighty River Power's submission suggests this can be over 20% in a given consumption month.

6.39 Different estimation methodologies are adopted by retailers and there is currently no enforceable requirement to require retailers to provide estimates which accurately reflect predicted usage. The relative impact of the different estimation methodologies on the accuracy of allocation is also influenced by the frequency of meter reads (see discussion in paragraphs 6.57 to 6.69).

6.40 It is clear that the current estimation processes do not meet the Regulatory Objective, but the current lack of transparency means it is difficult to determine precisely the scope of the problem.

6.41 The current processes also differ from standard international practice. The "Allocation and Reconciliation in Overseas Gas Markets" report prepared for Gas Industry Co in May 2006 by HP Invent ("HP Invent Report") noted as some of the main differences between the approach in New Zealand and other jurisdictions the lack of a comprehensive nominations regime, lack of a standardised forecasting approach and lack of a demand-weather model in downstream allocation.

6.42 To ensure more efficient and accurate allocation of downstream gas quantities it is necessary to ensure that estimated data more accurately reflects actual usage. There are a variety of options Gas Industry Co has considered for improving the accuracy of estimations – such as introducing estimation accuracy criteria, introducing a normalisation requirement and introducing a standard estimation methodology.

6.43 Submissions indicate considerable industry support for the introduction of estimation accuracy criteria. Introduction of criteria will help ensure the Regulatory Objective is better achieved by adding transparency and enforceability. Determination of whether

the introduction of criteria is appropriate depends to some extent on the scope of the criteria and consequential compliance cost.

6.44 To some extent the design of estimation accuracy criteria requires a number of somewhat arbitrary decisions. This is particularly the case here, where poor information is currently available on how inaccurate estimates are.

6.45 In light of this, Gas Industry Co considers that the initial criteria should be fairly conservative. Even conservative criteria will incentivise retailers to improve their estimating methodologies and help address the current inefficient incentives that exist for retailers to provide a flatter than accurate estimation profile.

6.46 The accuracy of estimates used in the data provided for initial allocation can not be properly assessed until data for final allocation is provided (see paragraph 6.151 in relation to the meaning of the terms "initial allocation" and "final allocation"). It is not until this point that initial forward estimates can meaningfully be compared to historic normalised data.

6.47 Estimating gas usage in any given month can be difficult, for example unseasonal weather may result in greater than expected residential use of gas for heating purposes. Accordingly, any accuracy criteria should not require compliance over too short a period (e.g. one month). At the same time, if the period is too long (for example, six months) then there is still scope for retailers to estimate a flatter profile than expected.

6.48 As discussed in paragraph 6.69, Gas Industry Co's preferred approach is the introduction of a requirement for 95% of group 5 and 6 meters to be read quarterly. In setting accuracy criteria for estimates, there may be some benefit in setting the period over which the accuracy criteria are assessed over a comparable three month time period to this 95% obligation. Although establishing estimation criteria may incentivise more frequent meter readings than the proposed minimum requirement.

6.49 Gas Industry Co does not want to set the accuracy criteria too high and introduce unnecessary compliance cost. However, there are already incentives in the retail market (e.g. retail billing obligations) which require retailers to ensure that their estimation routines are as accurate as possible. Further, the Reconciliation Code suggests a suitable criterion would be +/-2%, as page 49 states:

"As a guideline [for reconciliation], if the results indicate consistent non-compensating errors above 2% then consideration should be given to improving the estimation methodology which is contributing to the unacceptable error".

6.50 The submissions indicate that in any given month estimations for allocation groups 5 and 6 may be significantly outside this +/-2%. However, by aggregating assessment over groups 3 to 6 inclusive and considering accuracy over a rolling 3 month period retailers should be able to achieve high levels of accuracy and much higher than if the data for each group was assessed for each month.

6.51 Taking all of this into account, Gas Industry Co considers a limit of +/- 2% is appropriate as an initial limit for a quarterly period. This limit should be an aggregate limit (i.e. for groups 3 to 6) and assessed per gas gate. Introduction such of a +/- 2%

limit should assist achievement of "accurate" reconciliation, a key part of the Regulatory Objective.

6.52 The compliance arrangements should allow consideration of whether a breach of estimation criteria was material. Gas Industry Co's focus is on designing a regime that will identify the extent to which poor estimation routines are adding inaccuracies into the downstream reconciliation process and placing appropriate incentives on retailers to improve their pre-existing systems.

6.53 Gas Industry Co's view is that it is premature at this time to develop a standard methodology for forward-estimates. For example, there is insufficient information available at this point to justify development of a "Q file" equivalent. Standardisation of estimation methodologies will likely involve industry input and cost (both development cost and, to the extent any methodology requires retailers to change pre-existing systems, compliance costs). Given the lack of transparency of current arrangements, it is difficult to know in practice the efficiency and accuracy gains that will be achieved through standardisation. Also, the introduction of other measures discussed in this section will likely help minimise the need for specification of a forward-estimate methodology.

6.54 However, it is appropriate that the downstream reconciliation arrangements require retailers to submit data that relates to the calendar month in question. Accordingly, it follows that the arrangements should require normalisation. Gas Industry Co considers that it is appropriate for normalising of data for allocation groups 3 to 6 to usually occur on a simple pro-rated basis (i.e. with no seasonal adjustment). However, to cover particular instances where this may be inefficient (such as where an accurate seasonal profile has been developed) it is appropriate for there to be ability to seek approval from Gas Industry Co to apply a different normalisation formula in certain scenarios. Also, use of an approved profile (e.g. static deemed profile) will continue to be an option.

6.55 Gas Industry Co considers that the introduction of estimation accuracy criteria will provide more transparency of the level of inaccurate estimates. This transparency will enable Gas Industry Co to determine whether further review of the criteria is required or whether the introduction of a standard estimation methodology is required.

Options / Preferred approach for delivering the Regulatory Objective

6.56 Gas Industry Co's preferred approach to better meet the Regulatory Objective is:

- to introduce estimation accuracy criteria. The proposed criteria will assess on a rolling basis the accuracy of the data provided for initial allocation for allocation groups 3 to 6 on each gas gate aggregated over a rolling 3 month period with the comparable data provided for final allocation. The initial data is required to be within +/- 2% of the final data. For example, the data provided for January, February and March initial allocations will be aggregated and assessed in April the following year (i.e. when the data for final allocation is available) against the aggregated data provided for final allocation for that January to March period. The Allocation Agent will report to each retailer on their compliance and prepare appropriate reports for Gas Industry Co;

- to provide that normalised data be submitted for allocation groups 3 to 6 for each calendar month. Data is to be normalised on a simple pro-rated basis unless a different approach is approved by Gas Industry Co; and
- to not introduce a single methodology for forward-estimates at this time. Gas Industry Co will maintain a watching brief in this area, in particular using the information in estimation accuracy criteria reports.

Q4:	*Do you agree with the proposed estimation accuracy criteria and proposal to require normalisation of data? If not, why not?*

Issues regarding the use of metering devices

What the June Discussion Paper said

6.57 Paragraph 8.25 of the June Discussion Paper noted one proposal to help reduce estimation difficulties would be to require "all retailers to read every non-TOU ICP at least once every twelve months. This would ensure that there is at least one actual read in a submission prior to the final wash up".

What submissions on the June Discussion Paper said

6.58 The submissions largely agreed that introducing minimum meter reading requirements is appropriate. However, Contact and Genesis thought concentrating on an output or outcome measure was more appropriate than an input measure. For example, Contact thought it would be more appropriate to require the last revision to include 100% historic estimates and Genesis noted that any input approach should accommodate exceptional circumstances where retailers are legitimately unable to gain access to the site.

6.59 Many submitters considered that only requiring group 5 and 6 meters to be read once every 12 months would be insufficient. Some submissions supported a reading every 2 months and others quarterly. Wanganui Gas noted that the Electricity and Gas Complaints Commission's Code of Practice ("EGCC scheme") requires retailers to read all meters at least 4 times a year.

6.60 Many of the submissions noted that a more important issue is meter testing and accuracy. For example, Tom Tetenburg and Associates Ltd noted that:

"There needs to be measures in place which monitor that metering equipment test results are trending towards improved accuracy, and that when results are outside the limits, that retailer invoicing, allocation and network charging are all backdated sufficiently to correct for the problems."

6.61 There was also one suggestion that the metering obligations for some groups of allocation users may be incorrectly scoped. Specifically, Wanganui Gas suggested that the GART discussion regarding a proposal to drop the threshold for use of TOU devices from 10TJ to 5TJ should be further developed.

Further analysis on issues regarding the use of metering devices

6.62 Currently a lack of standardised practices (in particular surrounding the reading of allocation groups 5 and 6 meters) add inconsistencies, and make the allocation process less reliable. Gas Industry Co considers that the introduction of a minimum reading requirement would better achieve the Regulatory Objective than maintenance of the status quo.

6.63 The EGCC scheme is of relevance here and the submissions indicate that most retailers are able and willing to commit to regular meter reads. That said, Gas Industry Co acknowledges Genesis' point that it is important for any process to take into account that exceptional circumstances may exist where retailers are unable to gain access to a meter.

6.64 Gas Industry Co considers it appropriate to require 95% of each retailer's allocation groups 5 and 6 meters at each gas gate to be read within each gas year quarter and 100% within each gas year. This will result in data improvements, but should also have a spin off benefit of improved consumer billing accuracy. Given the EGCC scheme obligations to read meters at least 4 times a year, it is anticipated the introduction of the proposed allocation groups 5 and 6 meter reading requirements will have very limited cost implications.

6.65 Gas Industry Co has also considered Wanganui Gas' suggestion to further consider reducing the limit for the use of TOU devices from 10TJ to 5TJ. Any reconciliation arrangements should allow for TOU devices to be allowed at a retailer's discretion for any customer (whether or not that customer's load exceeds 10TJ). However, mandating a change in the threshold would need to be considered carefully. A reduction to 5TJ will no doubt improve accuracy, but may not be efficient. In order to assess the merits of introducing any change to the 10TJ limit, Gas Industry Co would need to quantify the number of TOU devices to be installed, the cost of each installation and the associated benefits (in terms of increased accuracy in the reconciliation process) that would be obtained. Based on the discussions of the GART, this analysis does not seem merited. However, Gas Industry Co would value further feedback on whether other industry participants also consider the 10TJ limit should be reviewed.

6.66 It is important to bear in mind that any downstream reconciliation arrangements that are put into place will need to include an appropriate review mechanism (see discussion on governance arrangements in section 9). Gas is a dynamic industry and as factors change over time it will be appropriate to reconsider the current arrangements and thresholds.

6.67 Meter testing and accuracy is an important part of the reconciliation process and if meters are not up to standard this will introduce errors and decrease reliability of the reconciliation information. The Reconciliation Code requires participants to comply with the obligations specified in NZS 5259:1997. This standard has subsequently been updated (see NZS 5259:2004).

6.68 It is appropriate that the reconciliation arrangements require compliance with this standard. However from a policy point of view, if the current standard is insufficient, this should be considered by Standards New Zealand, not by Gas Industry Co as part of this work stream.

Options / Preferred approach for delivering the Regulatory Objective

6.69 Gas Industry Co's preferred approach to better meet the Regulatory Objective is:

- to require that 95% of each retailer's allocation group 5 and 6 meters at each gas gate be read within each gas year quarter and 100% within each gas year; and
- to require retailers to comply with NZS 5259:2004. Retailers are to raise with Standards New Zealand any concerns regarding the inadequacy of that standard.

Q5: *Do you agree with the proposed minimum meter reading requirements? If not, why not?*

Q6: *Do you consider the 10TJ threshold for allocation groups 1 and 2 should be reviewed? If so, do you have any information that would assist Gas Industry Co to perform this review?*

Irregular updating of loss factors across distribution networks

What the June Discussion Paper said

6.70 The June Discussion Paper suggested that:

"8.14 As discussed in paragraph 4.33, loss factors determined by distributors are used to scale delivery point gas quantities (i.e. measured at the customer's site) up to equivalent receipt point (gas gate) quantities. They indicate the "efficiency" of a particular network (or section of network) in accounting for gas used on the network. Retailers will take these loss factors into account when determining their tariffs, since allocations of UFG are a cost of supplying gas to customers.

8.15 It is suggested that, in the event of not universally adopting a global allocation methodology across all gas gates, further work would be helpful in establishing how loss factors are calculated by network companies, the public availability of these to interested parties and whether these can be calculated on a 12 month rolling basis so that the loss factors remain as relevant and accurate as possible."

What submissions on the June Discussion Paper said

6.71 All of the submissions thought addressing loss factors would be important or at least an "interesting development". The submissions noted that currently changes to loss factors are too few and far between. One submission noted that a longer term than 12 months is appropriate to assess loss factors. Three of the submissions noted that addressing loss factors is important irrespective of the allocation methodology used.

Further analysis on loss factors

6.72 Under the Gas (Information Disclosure) Regulations 1997 ("Disclosure Regulations") pipeline owners are required to publicly disclose certain loss information annually for each system. Unaccounted-for gas and the unaccounted-for gas ratio are referred to in the Disclosure Regulations as:

*"**unaccounted-for gas**, in relation to gas supplied through a system, means the difference between the total measured (or estimated) amount of gas (in gigajoules)*

entering the system, and the total measured (or estimated) amount of gas (in gigajoules) supplied to gas customers"; and

"Unaccounted-for gas ratio, … must be calculated in accordance with the following formula:

$$\frac{a}{b} \times \frac{100}{1}$$

where-
a is the amount of unaccounted-for gas (in gigajoules) during the financial year; and

b is the amount of gas (in gigajoules) entering the system or systems during the financial year."

6.73 Gas Industry Co understands that in practice distributors "disclose" that insufficient information is available on losses to calculate the unaccounted-for gas ratio. This ratio is a slightly different concept from the loss factors used in reconciliation, but is relevant as it clearly supports information on losses being regularly updated and publicly disclosed.

6.74 In terms of reconciliation, loss factors usually apply to a region or geographic area. However, Gas Industry Co understands that in practice the losses are unlikely to be the same for all gas gates within a region or geographic area. As allocation occurs for each gas gate, Gas Industry Co considers it is appropriate for loss factors to be set and published on a gas gate by gas gate basis.

6.75 The HP Invent Report noted that:

"Although some components of UFG are likely to be customer-specific (eg metering error), only Victoria applies a customer-specific factor."[7]

6.76 Gas Industry Co does not consider it efficient to go as far as introducing customer specific loss factors.

6.77 There seems to be little doubt that loss factors need updating. In relation to many gas gates, loss factors have not been updated since 2000 and the original setting of the loss factors was not subject to a rigorous process. However, it is not clear who should calculate loss factors nor how they should be calculated. The two obvious candidates for performing the calculation are the Allocation Agent or distributors.

6.78 Distributors are currently required to calculate and update unaccounted-for gas ratios under the Disclosure Regulations. Arguably to the extent that losses reflect gas escapes, leaks and other physical losses, distributors are in a position to affect and minimise losses. A number of submissions on the June Discussion Paper (e.g. Genesis and Nova) considered Gas Industry Co should require distributors to update loss factors. Also, some submissions received on Gas Industry Co's switching proposal paper supported distributors calculating and maintaining loss factors on the registry.

[7] Page 20, HP Invent Report.

6.79 From a reconciliation perspective, the calculation of loss factors is essentially to provide an indication to retailers (and any potential new entrant) of the anticipated losses (i.e. the difference between the input measured at the gas gate and metered consumption at the gas gate). Retailers can then use this estimate to calculate pricing structures that will appropriately allow for UFG.

6.80 Gas Industry Co considers that it is appropriate for distributors to calculate loss factors on a gas gate basis so that the proposed loss factor is likely to result in an accurate estimate of gas losses for the period it will apply.

6.81 Section 7 of this paper discusses allocation methodologies. In that section Gas Industry Co details its preferred approach of mandating a 1 month UFG global allocation for all gas gates. Under that allocation methodology UFG would be allocated across all allocation groups. Gas Industry Co considers that the calculation of loss factors should also result in a single loss factor that applies to all allocation groups at the relevant gas gate.

6.82 In terms of the frequency of calculations, Gas Industry Co considers the Regulatory Objective would be better met if loss factors were reviewed and reset annually. Regular review of loss factors is important to assist retailers manage risk and help expose untenable UFG. Downward pressure on loss factors is important to ensure more efficient and accurate downstream reconciliation.

6.83 Further work is required to assess how loss factors should be calculated before Gas Industry Co would be in a position to mandate a set process. For example, is a 12 month average appropriate or is Powerco's concern ("garbage in/garbage out") valid? How should the loss factor calculations take into account extreme events (e.g. oil contamination)?

6.84 At this point, it is envisaged that the calculations will usually involve averaging data from at least the previous 12 months that have been appropriately adjusted for outlier events (such as oil contamination). However, distributors may appropriately adopt alternative calculation timeframes provided the calculation meets the objective of accurately estimating expected gas losses. For example, distributors may consider a longer time period is appropriate to predict future UFG losses. A longer timeframe may soften the impact of exceptional events and prevent excessive volatility in loss factors from year to year. For example, Gas Industry Co understands that in the New Zealand electricity industry there is at least one distributor who uses a rolling 5 year average and in the Australian electricity industry a rolling 3 year average is used.

6.85 Gas Industry Co proposes a process which requires distributors to calculate loss factors within set bounds and enables appropriate opportunity for review. At this stage, it is considered that a suitable process may be to require distributors to publish their proposed loss factors (and supporting calculations and assumptions) by 1 July (to apply for the next gas year). So there is a single reference point, all loss factors should be published on the same website as the information specified in paragraph 6.173.

6.86 If industry participants consider the proposed loss factors are inappropriate they will be able to notify the distributor and Gas Industry Co within 2 weeks of publication of the loss factor by Gas Industry Co. In the event of any such challenge, Gas Industry Co will determine the loss factor taking into account the distributor's proposed loss

factor, the industry participant's reasons for their challenge and any other information which Gas Industry Co considers fit. Gas Industry Co will consider the issue and update the loss factor if the original loss factor does not seem likely to result in an accurate estimate of gas losses for the gas year and gas gate to which it will apply. Gas Industry Co will use reasonable endeavours to determine and publish the updated loss factor by 1 September.

6.87 If there are continued issues regarding the setting of loss factors, Gas Industry Co envisages establishing a work stream to determine a standardised process for the calculation of loss factors. This work stream could also be tasked with ensuring appropriate incentives are in place to minimise physical and non-physical losses.

6.88 The proposed process will ensure all loss factors are published in a single location (e.g. on Gas Industry Co's website). Publication of loss factors will help provide greater transparency of the prevalence of poor quality data and poor distribution practices. The current levels of UFG suggest there are major issuers with poor quality data. Publication of UFG and allocation information (see paragraph 6.173) will help further expose poor practices. The ability of the Allocation Agent (see, for example, paragraph 8.26) or an auditor (see paragraph 10.12) to investigate the causes of anomalous UFG percentages will also assist.

6.89 Loss factors are only meant to provide an useful estimate of losses. Publication will assist retailers assess risks/uncertainties of operating. As noted in paragraph 6.173, Gas Industry Co intends to require publication of UFG on a per gas gate basis. If a retailer disagrees with a loss factor, there is nothing in the proposed arrangements which would prevent that retailer using the published UFG information to calculate its own expected estimate of losses for the purposes of its internal pricing decisions.

Options / Preferred approach for delivering the Regulatory Objective

6.90 Gas Industry Co's preferred approach to better meet the Regulatory Objective is:

- to require loss factors to be annually updated (each gas year) on a per gas gate basis. Each updated loss factor should apply to all allocation groups at the gas gate and should apply from the start of the gas year;
- distributors should annually calculate updated loss factors and provide these to Gas Industry Co (along with supporting calculations) by 1 July. There will be no mandated process for this calculation but it is envisaged the calculation will likely involve averaging at least 12 months of data that has been appropriately adjusted for outlier events or involve some other calculation that is likely to result in an accurate estimation of the expected losses for the period to which the loss factor will apply;
- Gas Industry Co to publish updated loss factors and the calculations supporting those loss factors;
- industry participants must notify the distributor and Gas Industry Co within 2 weeks of publication if they consider the proposed loss factor is inappropriate and, in such circumstances, Gas Industry Co will determine the updated loss factor. Gas Industry Co will use reasonable efforts to publish the updated loss factor by 1 September; and

- if there are continued issues regarding the setting of loss factors, Gas Industry Co will establish a work stream to consider introducing a standardised process.

Q7:	*Do you agree with the proposed process for the calculation and publication of loss factors? If not, how should it be improved?*

Further analysis on quality and reliability of allocation information

6.91 In addition to the input issues discussed above, there are a number of other factors that impact on the quality and reliability of allocation information. Many of these matters relate to technical problems that are encountered by retailers in endeavouring to meet their obligations to provide accurate input information.

6.92 Specific problems Gas Industry Co has identified are:

- inadequate timeframes;
- problems around customer switching and the lack of a central registry; and
- the lack of effective incentives to provide accurate information, including the lack of mandatory performance criteria for quality of data.

Inadequate timeframes

What the June Discussion Paper said

6.93 The June Discussion Paper did not discuss the timeline for submitting allocation information.

What submissions on the June Discussion Paper said

6.94 Contact noted in its submission that the provision of high quality data is difficult given the tight submission timeline – effectively close of business on the 3rd business day. Other submissions did not specifically comment on issues with this timeline. However, Gas Industry Co understands from informal discussions that the 24 hour turnaround period provided for the Allocation Agent to perform allocations is tight, particularly where participants submit late or poor quality data.

Further analysis on inadequate timeframes

6.95 The monthly allocation timeline is tight, but this recognises the commercial drivers for allocation information being made available quickly. It is possible that extending the timeframes would result in more accurate information being used in the allocation process (by allowing more time to perform, validate and process meter read information at the end of the month). But benefits gained through any such improvements would need to be considered against the cost to the industry of delaying monthly allocations. In New Zealand, this may be a greater issue than in other markets, given the interplay between upstream reconciliation and downstream reconciliation.

6.96 The HP Invent Report considered at a high level the timeline for allocation in overseas markets. Most overseas markets appear to tie allocation to the meter

reading process. However, Ireland appears to do a monthly allocation. The Irish market provides for a longer processing timeframe (i.e. allocation in Ireland occurs 12 days after month end, rather than 5 days after month end).

6.97 The current timeline for allocation is transparent, applies equally to all participants, has been in operation for many years and appears to be working. While there is some concern that the timeframe for industry submissions is too tight, there does not appear to be widespread concern. Gas Industry Co would be interested to know whether any parties other than Contact consider the current timeframes are too tight. Any adjustment in the timelines would need to consider carefully flow-on consequences and involve suitable consultation with industry.

6.98 At this time, the current process for the submission of data seems to meet the Regulatory Objective and there does not seem sufficient reason to consider changes. That said, any new reconciliation arrangements which are put into place should include a review mechanism which would allow issues such as this to be appropriately considered (see discussion on governance in section 9).

6.99 Another aspect of potential concern is the period available to the Allocation Agent to perform allocation calculations. As noted above, if information is provided to the Allocation Agent late or the information is of poor quality, then the 24 hour period will be onerous. However in the usual circumstances the 24 hour period appears to be realistic, particularly once standardisation of data file formats is introduced.

6.100 Gas Industry Co considers it is appropriate for any Allocation Agent appointment to require the Allocation Agent to use reasonable care and skill to adhere to the current 24 hour turnaround period. However, delay should be excused if caused by factors outside of the Allocation Agent's control.

Options / Preferred approach for delivering the Regulatory Objective

6.101 Gas Industry Co's preferred approach to better meet the Regulatory Objective is:

- retain the current timelines for monthly allocation. However, the reconciliation arrangements should include a review process where issues such as this can be considered in the future if there is sufficient industry concern; and
- to excuse the Allocation Agent from any failure to deliver allocations on time provided the agent used reasonable care and skill.

Q8: *Do you consider that the current month end timeframes for the provision and calculation of allocation information are appropriate?*

Customer switching and lack of a central registry

What the June Discussion Paper said

6.102 The June Discussion paper noted briefly the interplay between the switching and registry work stream and the reconciliation work stream.[8] In particular, noting that

[8] See paragraphs 1.7, 7.3 and 10.33 of the June Discussion Paper.

enhancements to allocation and reconciliation arrangements may help to improve the options for customers to switch between suppliers. This is because informal discussions indicated that some retailers are hesitant to compete for customers due to the deficiencies of the current reconciliation regime.

What submissions on the June Discussion Paper said

6.103 Numerous submissions commented on errors introduced into downstream reconciliation processes through a lack of clarity surrounding switching and registry information. Submissions included:

- general observations that data referencing problems are a source of poor quality data[9];
- comments on the lack of incentives for parties to ensure connections are properly recorded and usage properly checked[10];
- comments that critical details are not being appropriately passed between retailers. For example, Nova referred to anecdotal evidence of "meter owners and retailers failing to ensure that details such as multipliers and other critical site details are passed on to new retailers at the time of switching or installation"; and
- some mention of specific switching problems. For example, Genesis noted where a TOU site, whose consumption was approximately 10% of the total gas take at the relevant gas gate, switched from Genesis to another retailer but Genesis' allocated volumes did not represent a 10% drop in load. Apparently, the Allocation Agent was unable to gain access to information to fix the problem. Eventually following discussions between the relevant retailers this issue was corrected going forward, but correcting the misallocated months was then problematic.

Further analysis on customer switching and lack of a central registry

6.104 The Gas Industry Co has noted in the Switching and Registry work stream a number of deficiencies. It seems clear that the lack of accurate switching information adds errors into downstream reconciliation processes. For example, retailers sometimes do not know which ICPs they are responsible for at which time, or do not clearly know critical information about an ICP (such as which gas gate the ICP is connected to or the meter pressure information for that site). Gas Industry Co also understands from

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[9] For example, see comments by Mighty River Power and Powerco. Mighty River Power - "there is no clear reference published that assigns the appropriate Gas Gate to an ICP (or vice versa). This leads to confusion to as to what Gas Gate consumption volume should be submitted against by retailers. The necessity of this does not seem to be recognised by the gas pipeline owners". Powerco - "data quality is further exasperated by a lack of a central registry which would record ICP tenures and would assist identifying ICP's which are not being accounted for by a retailer".

[10] For example, see comments by Nova and Tom Tetenburg and Associates Ltd. Nova noted that distribution companies should have some obligation to "ensure that all connections to the network are recorded and allocated to a retailer who is responsible for reconciling consumption at that site". Tom Tetenburg and Associates Ltd noted that "The registry project may clear up a lot of the switching problems, but are the network registries being constantly checked against retailer billing systems to identify unassigned ICPs? Does checking for disconnected ICPs still using gas take place, and by whom? Only when all the basics are being covered off by all parties will there be a reduction in UFG, the key performance indicator".

informal discussions that some retailers can continue providing estimates for customers many months after that customer has switched to another retailer – this can result in two retailers submitting data for the same customer over the same period.

6.105 The lack of accurate switching information leads to poor quality data being used in the allocation process and to inefficiencies. In the Switching Statement of Proposal, Gas Industry Co detailed its intent to recommend to the Minister rules which would establish a central registry and standard switching process. At the date of release of this paper it is not clear the precise scope of the switching proposal that will be recommended to the Minister. However, for the purpose of this paper, Gas Industry Co assumes that some form of improved switching arrangements will be implemented in the future.

6.106 It is envisaged that the improved switching arrangements once implemented will address many of the switching concerns raised by industry participants in their submissions. It is premature to "second guess" at this point whether further changes will be required once the switching proposal goes live to achieve the Regulatory Objective. Gas Industry Co considers it more appropriate to consider this following implementation of the switching and registry arrangements.

6.107 The timeframe for implementation of any switching and registry proposal is not certain (in particular, due to the requirement for a Gas Act amendment). Accordingly, it is possible that changes to the reconciliation arrangements may occur prior to the go-live date of the central registry.

6.108 Gas Industry Co considers it appropriate for any proposed downstream reconciliation arrangements to be capable of taking effect prior to the introduction of a central registry. However, it is acknowledged that a participant's ability to comply with certain obligations may be more difficult prior to the registry's introduction. For example, retailers will need to seek confirmation from distributors when they are unsure which gas gate an ICP is connected to rather than simply being able to refer to the registry.

6.109 Gas Industry Co's view is that the reconciliation arrangements should include appropriate "exemption" and "transitional" provisions to excuse non-compliance with any obligations which participants are unable to meet prior to the go-live date of the central registry. As such, implementation of the central registry will help improve compliance with the proposed reconciliation regime, rather than fundamentally change participants' obligations.

Options / Preferred approach for meeting the Regulatory Objective

6.110 Gas Industry Co considers the implementation of the switching and registry arrangements (which are being progressed by Gas Industry Co as part of a separate work stream) may be sufficient to address industry concerns regarding poor information that results from switching and registry issues. Accordingly, the preferred approach is to consider whether additional changes are required to better meet the Regulatory Objective once the switching and registry arrangements have been implemented.

6.111 It is acknowledged that transitional and/or exemption provisions may be required if the reconciliation arrangements are implemented before the central registry go-live date.

Q9:	*Do you consider transitional provisions and/or exemptions will be required prior to the central registry go-live date?*

Lack of effective incentives to provide accurate information and lack of mandatory performance criteria

What the June Discussion Paper said

6.112 The June Discussion paper discussed a range of factors that contributed to non-compliance with the Reconciliation Code. One factor was that "retailers may have an incentive to present data to the allocation agent that is based on inappropriate estimates"[11].

6.113 That paper also proposed the introduction of mandatory performance criteria for quality of data.[12] The paper did not specify in any detail how the mandatory performance criteria should be structured. But did ask submitters to comment on whether Gas Industry Co should establish accuracy criteria for estimates.

What submissions on the June Discussion Paper said

6.114 As discussed further in section 10, submitters largely agreed that compliance is problematic and that there are not appropriate incentives to ensure good quality data is provided. There was general submitter approval for the introduction of estimate criteria and mandatory performance criteria. Specific comments on the appropriate design of those criteria are discussed elsewhere in this paper.

Further analysis on the lack of effective incentives to provide accurate information and lack of mandatory performance criteria

6.115 The Gas Industry Co agrees that the current lack of incentives to provide accurate information is concerning, particularly given the importance of accurate downstream reconciliation to the effective operation of both the downstream and upstream gas markets. Gas Industry Co understands there is an obligation in most allocation agreements which requires any party that ascertains or believes there is an error in information supplied to the Allocation Agent to promptly notify the Allocation Agent[13]. However, there are concerns that there is a lack of incentives to compel compliance with this obligation. Obviously, this issue is closely tied to the lack of effective compliance arrangements.

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[11] See paragraph 8.17 of the June Discussion Paper.

[12] See paragraph 8.26 of the June Discussion Paper.

[13] See clause 15.1 of the Model Allocation Agreement attached as Appendix E to the Reconciliation Code.

6.116 There is also a concern that under the differencing methodology incumbent retailers are not required to supply certain data. This makes it difficult to properly calculate UFG. Identification of UFG is a crucial first step towards minimising UFG losses and increasing efficiency. It is important that UFG values can be accurately calculated and Gas Industry Co considers this should occur on a per gas gate basis. The difference model also arguably creates poor incentives on non-incumbents, as any inaccurate data submitted by such retailers that increase UFG will not result in a greater allocation to them.

6.117 Gas Industry Co acknowledges that requiring "global submission" of data by all participants may result in some increased costs, in particular to incumbent retailers. However, Gas Industry Co does not anticipate that the costs involved will be significant and any such costs will be outweighed by the benefits to the industry of more accurate UFG calculations and disclosure. It is relevant here that non-incumbent retailers currently face these costs and that incumbent retailers have not noted any concern with this increase. For example, Genesis' submission on the June Discussion Paper noted:

"…the discussion paper seems to suggest that moving to 'global' may be affected by retailers requiring time to adjust their systems. Given that Genesis Energy has the largest incumbency, it can unequivocally state that such a comment does not relate to its systems and would encourage the Gas Industry Company to move this issue forward as fast as possible".

6.118 Further, Gas Industry Co understands that Contact (the retailer with the second greatest level of incumbency) has previously tried to migrate all of its gas gate incumbencies to a "global methodology" (which implies Contact would also be happy with a "global submission" of data requirement).

6.119 To the extent that changes to existing systems are required, Gas Industry Co considers at least 6 months should be allowed for implementation, which should provide ample opportunity for retailers to make the necessary improvements. Any reconciliation arrangements should also include transitional and exemption provisions, which would be able to address any significant ongoing retailer concerns.

6.120 Accordingly, Gas Industry Co considers that (regardless of the allocation methodology applied) there should be a mandatory requirement in any downstream reconciliation arrangements for all participants (including incumbents) to submit accurate data to the Allocation Agent and comply with all applicable data submission requirements.

6.121 Further allocations will only improve the quality of initial allocation if appropriate revised information is provided. There are currently no adequate incentives to ensure participants provide updated information if they become aware that there were errors in their original allocation information. This lack of incentives is particularly problematic when the information is self incriminating. As discussed paragraph 6.151, Gas Industry Co considers all participants should be required to provide refreshed information to ensure that accurate interim and final allocations can occur.

6.122 To meet the Regulatory Objective (i.e. to obtain accurate reconciliation and the efficient, fair and reliable provision and disclosure of data and information) it is crucial

that all industry participants provide appropriate information according to prescribed timeframes.

6.123 There may be instances where a participant is unknowingly and despite their best endeavours providing inaccurate information (for example, where a faulty meter is recording inaccurate information). Due to the critical importance of good quality data in the effective operation of any reconciliation regime, Gas Industry Co considers it is appropriate for these sort of instances to be a "technical breach" but for the compliance regime to only cover "material" breaches. This is important because an unwilling breach in relation to a large customer (for example, a faulty TOU device) could result in material errors in allocation which require adjustment.

Options / Preferred approach for delivering the Regulatory Objective

6.124 Gas Industry Co considers that the Regulatory Objective will only be met by a mandatory requirement on industry participants to submit accurate data to the Allocation Agent and to comply with all applicable data submission requirements.

6.125 Gas Industry Co acknowledges that the use of estimates can lead to inaccuracies. The preferred approaches for reasonable limits that appropriately address these issues are detailed in other parts of this paper.[14]

Q10: *Do you agree with the preferred approach of implementing a mandatory requirement on all industry participants to submit accurate data and comply with all data submission requirements?*

Further analysis on "wash-ups" and corrections

6.126 Following initial allocation at month end, it is necessary to revisit the calculations at a later stage to confirm their accuracy and, where necessary, adjust for any errors. The June Discussion Paper referred to "wash ups", which are in effect further allocations. The paragraphs below consider issues related to "wash ups" and the current ad hoc correction regime.

6.127 The further analysis on this issue refers to further allocations, rather than "wash ups". Gas Industry Co considers that the term "wash up" may infer a financial settlement. Gas Industry Co's focus is on improving reconciliation information. The subsequent use of that information for the purpose of financial settlements is outside the scope of Gas Industry Co's review.

[14] See paragraph 6.56 in relation to performance criteria limits for estimates used in the allocation process and paragraph 6.151 in relation to a requirement for final allocation data to include actual data or 100% historic estimated / normalised data.

"Wash-ups"

What the June Discussion Paper said

6.128 The June Discussion Paper discussed that the current reconciliation timeframe may be inappropriate and leading to poor reconciliation information. In particular, paragraphs 8.21 to 8.24 considered alternative "wash-up" periods as follows:

"8.21 It is proposed to implement arrangements for two wash-up periods. It is proposed that the first of these would occur after either the fourth or the sixth month following the allocation month in question. The second would be undertaken after the twelfth month following the allocation month.

8.22 The Gas Industry Co is aware of concerns from some industry participants actively trading in upstream markets that the adoption of additional wash-up periods may give rise to additional business risks. There are two key areas of concern. First, it is argued the potential for retrospective amendments to the allocations of Maui legacy gas under the Maui Pipeline Operating Code (MPOC) would introduce additional undesirable complexity. [See clauses 3.10 and the following in the MPOC.] Second, it is argued that the [Vector Transmission] bilateral contractual arrangements with shippers (which are not necessarily uniform for all shippers), and the limitation on the liability of the Balancing and Peaking Pool (limited to the amount in the BPP Account) may mean that shippers may not receive payments to which they become entitled following a retrospective adjustment to Balancing and Peaking Pool positions (that reflect adjusted mismatch positions for example). [As a result of a retrospective adjustment to an allocation, some parties will have an obligation to pay more into the Balancing and Peaking Pool, while others will have offsetting rights to receive payments from the Pool. However, if one party does not make its required payments, the Pool may be short of funds, and the other parties may not receive (the full amount of) the payments to which they would otherwise be entitled. Since [Vector Transmission] has bilateral contracts with each party (the terms of which are not necessarily known to the other parties), it would be a matter for [Vector Transmission] to pursue recovery under the appropriate contract. Participants who are entitled to receive payment from the Pool would not be able to pursue the payments under those contracts.]

8.23 As an alternative to the proposal, some upstream participants have suggested the focus should be on improving the quality of the month end daily allocations. Suggestions have also been made to limit the number of reallocations for each month to one or at most two.

8.24 The difficulties raised in paragraph 8.22 may need to be addressed in the longer term. However, the Gas Industry Co considers that these difficulties are not likely to be of sufficient magnitude to outweigh the advantages of implementing the proposal as part of the short-term changes to the downstream allocation arrangements. The Gas Industry Co understands that such "wash-ups" are already currently being undertaken, although on an ad-hoc basis. Regular wash-ups would effectively formalise this ad-hoc process and make it mandatory for all industry participants to comply. Better quality allocation information would become available, improving the ability of participants to manage their business risks."

6.129 Submitters were asked to comment on whether Gas Industry Co should introduce formalised, regular "wash-ups" of month end allocations after 4 or 6 months and after 12 months following the month in question.

What submissions on the June Discussion Paper said

6.130 All bar one of the submissions supported the introduction of regular "wash ups"[15]. The remaining submission (Vector) did not openly support the introduction, noting that it was probably a good idea but should only occur once Gas Industry Co has considered other issues.

6.131 Submissions were split on whether the initial "wash-up" should occur after 4 or 6 months. Contact and Nova preferred 4 months. Genesis, Tom Tetenburg and Associates Ltd and Powerco preferred 6 months. Submissions also supported that any introduction of alternative "wash-up" periods would need to be formalised and structured (for example, include clear official "close off" periods).

6.132 Although not specifically addressed in the June Discussion Paper, numerous submissions supported introducing set criteria for historic estimate percentages as part of the "wash up" process. For example, Contact suggested 85% historic estimates for the month 4 revision and 100% for the month 12 revision.

6.133 Wanganui Gas also noted that they would like to see the end of network scaling and considered "wash up" accounts should be based on the allocation wash up process.

Further analysis on "wash-ups"

6.134 The reconciliation and "wash-up" timetable in the Reconciliation Code is tied to the gas year and seems to be fundamentally flawed. The process in the Reconciliation Code requires reconciliation to be performed by the Allocation Agent annually in October for the previous 12 months (to 1 October), and at other times as is considered necessary, to verify the reasonableness of previous estimations. The Reconciliation Code suggests, as a guideline, that if the results indicate consistent non-compensating errors above 2% then consideration should be given to improving the estimating methodology which is contributing to the unacceptable error.

6.135 Given the range of issues with allocation information discussed above (particularly the large content of forward estimates), a timeframe which requires reconciliation in October for the previous 12 months (including the month immediately prior) is inappropriate and will not achieve the Regulatory Objective. Such a short timeframe is incapable of achieving efficient or accurate reconciliation and is instead likely to result in a number of ad hoc corrections occurring after reconciliation (see discussion on corrections in paragraphs 6.152 to 6.160), particularly in relation to the period July to September.

6.136 Gas Industry Co has considered whether international precedents would be useful here. However, the HP Invent Report indicates there are various approaches to the process and timing of reconciliation in overseas markets and no clear relevant international precedent.

6.137 The approach taken in the electricity industry has also been considered, where a rolling time frame is applied. There are a lot of obvious benefits with a rolling time frame. The submissions also seem to support the introduction of a rolling time frame,

[15] Although GasNet's support was conditional upon such introduction being cost effective.

as indicated by the support for a 4 or 6 month “wash up” and final 12 month “wash up”.

6.138 The decision of which time periods to implement (4, 6, 12, 15 months etc) is somewhat arbitrary. In reality, any time period may be an improvement on the status quo arrangements.

6.139 Gas Industry Co has considered whether there is merit in aligning gas reconciliation time frames with electricity time frames. Electricity revisions are currently done for consumption periods 1, 3, 7, 14, 18 and 24 months prior to the current reconciliation period. However, revised rules have been approved by the Minister for implementation in May 2008 that have eliminated the standard 18 and 24 month revisions. Accordingly, Gas Industry Co considered whether there would be advantages in aligning the gas reconciliation periods to 1, 3, 7 and 14 months, or using the same intervals, if a lower number of revisions is adopted.

6.140 Gas Industry Co also considered the merit in aligning the revision time frames with other timeframes being proposed for the downstream reconciliation regime. As discussed above, it is proposed to introduce minimum quarterly requirements for the reading of group 5 and 6 meters and a requirement for estimates to meet certain criteria over a rolling aggregated three month period. These measures (as well as the other measures proposed) should result in improvements to the allocation data over the three months following the initial allocation.

6.141 Gas Industry Co considers that the commercial benefits of performing final allocation as fast as possible and in aligning with other gas reconciliation time periods outweigh any benefits that would be achieved by aligning the gas reconciliation periods with the electricity industry periods.

6.142 Based on the data improvements that are likely to occur during the three months following initial allocation, Gas Industry Co considers it is appropriate for the first revision (“interim allocation”) to occur after 4 months.

6.143 In terms of the final allocation period, a one year period should be sufficient to encapsulate all foreseeable data improvements and ensure that the initial allocation information is revised to include 100% historic estimates. Therefore, Gas Industry Co considers it is appropriate for final allocation to occur one year after initial allocation.

6.144 Gas Industry Co plans to introduce a historic estimate requirement for final allocation, but not for the interim allocation. In practice, requiring participants to work towards 100% historic estimates within the year following initial allocation will ensure that a suitably high percentage of historic estimate data is included within the information provided for the interim allocation.

6.145 In order for the Allocation Agent to perform the interim allocation and final allocation it will be necessary for all participants to submit revised data for the original initial allocation period. Gas Industry Co understands that currently there is a materiality threshold that is applied to “wash ups” (both in terms of the exercise of a retailer’s discretion to provide data and the Allocation Agent’s calculations). Gas Industry Co considers that this materiality threshold is inappropriate. Accurate allocation and identification of UFG requires that all changes are taken into account.

6.146 Where interim or final allocations result in minor changes to the initial allocation information, participants may be reluctant to undo commercial payments. This is understandable. However, the mechanics of such payments are outside the scope of this review. Commercial arrangements cover these charges and participants are capable of agreeing a materiality threshold for wash-ups in those contracts if considered desirable.

6.147 The proposal to introduce rolling revisions means that each month participants will need to supply information for, and the Allocation Agent will need to perform, the initial allocation (month 1), interim allocation (month 4) and final allocation (month 13). Gas Industry Co considers the time frames for these services should be spread over the month, to smooth the reconciliation work load of participants and the Allocation Agent. Smoothing the work load will help reduce the likelihood of unintentional errors.

6.148 In response to Wanganui Gas' submission, Gas Industry Co does not consider it appropriate to consider as part of this review network scaling and the calculation of network wash up invoices. This review is focused on improving the accuracy and efficiency of reconciliation information and is not considering in detail how that information is subsequently used by network companies for billing purposes.

6.149 As noted in paragraph 6.160, the Allocation Agent will only be able to "correct" allocation information in very limited circumstances. However, it is acknowledged that material errors may be discovered after allocation has occurred (for example through an "investigation" or an "audit"). Accordingly, there may be limited circumstances where it is appropriate to re-open the final allocation data and perform a "special allocation". Special allocations are discussed further in section 10.

Options / Preferred approach for "wash-ups"

6.150 The current arrangements (performing final "reconciliation" in October each year for the previous gas year) results in inaccurate reconciliation, which is unsuitable for industry and does not meet the Regulatory Objective.

6.151 Gas Industry Co's preferred approach for meeting the Regulatory Objective is the introduction of rolling revisions. Gas Industry Co considers it inappropriate to refer to these revisions as "wash ups" which may infer a financial settlement. The decision of which time periods to choose for the performance of revisions is somewhat arbitrary. However, Gas Industry Co's preferred design is:

- "interim allocation" at 4 months (i.e. initial month plus 3 months);
- "final allocation" at 13 months (i.e. initial month plus 1 year);
- all participants should be required to submit revised data for the interim allocation and the final allocation;
- data submitted for the final allocation must include actual data or 100% historic estimated / normalised data; and
- there should be no materiality threshold on interim and final allocations (i.e. all errors will be recalculated no matter how small).

Q11: *Is Gas Industry Co's proposed regime for rolling 4 month (interim allocation) and 13 month (final allocation) revisions appropriate? Is the terminology ("interim allocation" and "final allocation") appropriate or would alternative terminology (e.g. "first revision" and "second revision") be more appropriate?*

Corrections

What the June Discussion Paper said

6.152 The process for corrections was not discussed in the June Discussion Paper.

What submissions on the June Discussion Paper said

6.153 A few submissions commented on the current ad hoc correction process. In particular:

- Contact's submission stated that the Allocation Agent should have no discretion as to the processing of revisions as is the current position for corrections;
- Gas Net believed there have been very few retrospective corrections applied to date by the Allocation Agent; and
- Tom Tetenburg and Associates Ltd noted that most of the corrections are about poor data quality.

Further analysis on corrections

6.154 As discussed in paragraph 6.151, Gas Industry Co's preferred approach is to introduce additional allocations three months (the interim allocation) and one year (the final allocation) after the initial allocation. These additional allocations will not include a materiality threshold. The introduction of these additional allocations will significantly reduce the need for ad hoc, discretionary corrections and thus it is appropriate to consider whether the current correction process should be retained.

6.155 The Reconciliation Code provides (see clause 6.6(h)) that the Allocation Agent may "Correct any previous Allocation if information comes to hand which proves it to be materially in error". Clause 12 of the Reconciliation Code includes a number of principles and provisions detailing when corrections should occur. For example, the Reconciliation Code details that corrections may occur following the discovery of incorrect metered volumes or quantities, corrector errors, TOU device or data storage device failures, correction factor errors, and billing or estimation process errors. The Reconciliation Code does not include any set process for performing such corrections. However, the Reconciliation Code states that "Corrections must be dealt with in a consistent and systematic way using the best information available".

6.156 Gas Industry Co understands that in practice the Allocation Agent will do a correction when the error is greater than 500 GJ at a gas gate (irrespective of the usage profile at that gas gate) or where the error affects overrun charges. If the error is less than these thresholds, Gas Industry Co understands that the standard practice is to carry the value forward until the collective errors at the gas gate are greater than 500GJ or affect overrun charges. Under this regime, there are usually about 6 to 8 corrections (for all downstream gas gates) each month.

6.157 The introduction of interim allocations and final allocations will address many of the errors which are currently corrected and will cover the examples detailed in the Reconciliation Code. Accordingly, the utility of the current correction process many be negligible once the revised arrangements are put into place. Any ad hoc correction process introduces an element of commercial uncertainty and should only be provided for if clearly required.

6.158 That said, Gas Industry Co does see some merit in retaining a correction process in very limited circumstances. It is possible that the Allocation Agent may realise, or be advised, soon after release of allocation information that the information included a manifest error (for example, if an incorrect version of the allocation spreadsheet was published or a participant realised that it provided the wrong data file to the Allocation Agent). In these situations it would be inappropriate to wait until the next allocation period or the outcome of an "investigation" to update the incorrect allocation information. These sort of human errors are foreseeable given the tight time frames and the current lack of standardised processes.

6.159 At the same time, participants and the Allocation Agent should be expected to put into place accurate processes that minimise any such events and, in the rare circumstances where errors do occur, should be able to identify such errors quickly. Accordingly, Gas Industry Co considers there should be an ability for the Allocation Agent to "correct" allocation information (either initial, interim or final) within a limited time of its publication if a manifest error is discovered. One working day should be sufficient.

Options / Preferred approach for delivering the Regulatory Objective

6.160 The Regulatory Objective requires that reconciliation arrangements ensure accurate reconciliation and provide for consistent, transparent and enforceable processes. The current ad hoc correction process is too uncertain and unenforceable and fails to deliver the Regulatory Objective. The need for a correction process will be significantly diminished by the introduction of interim and final allocations. However, Gas Industry Co considers it is appropriate to retain an ability for the Allocation Agent to correct allocation information (of any allocation - initial, interim or final) within one working day of its publication if a manifest error is discovered.

Q12: *Do you agree with Gas Industry Co's proposed restriction of the correction process (i.e. limiting corrections to within one working day of publication and only if a manifest error is discovered)? If not, what alternative correction process do you propose?*

Further analysis on lack of transparency / confidentiality issues

What the June Discussion Paper said

6.161 The June Discussion Paper did not discuss in any detail the current lack of transparency surrounding downstream reconciliation arrangements. However, paragraph 8.16 of the June Discussion Paper did note:

"Some parties have also suggested that the availability of gas gate data (daily metered throughput, available next day) would also be useful to improve the ability of retailers to manage trading risks. However, the Gas Industry Co does not propose to

address this issue in the short-term as further discussion would be needed to address potential confidentiality issues."

What submissions on the June Discussion Paper said

6.162 Subject to some confidentiality concerns, all of the submissions supported the daily publication of daily gas gate metered quantities. The submissions noted a number of benefits which publication would provide (for example, assisting management of pipeline balancing risks, improving the ability to forecast demand, assisting investigations into anomalous volumes, providing greater confidence in allocated volumes and greater transparency of trends).

6.163 Some submissions made other comments regarding problems with confidentiality and the lack of transparency. For example:

Contact also considers that greater transparency is an effective mechanism for achieving compliant performance by highlighting poor performance or issues at an early date so they can be dealt with on a timely basis.[16]

Further analysis on transparency / confidentiality issues

6.164 While not discussed in any detail in the previous discussion paper, the policy aims of this review (as encapsulated in the Regulatory Objective) include a number of factors which suggest that more transparency of reconciliation information is required. For example, due to the existing confidential practices all of the following aspects of the Regulatory Objective are not being properly met:

- ensuring the standards for.. providing and disclosing of data and information are safe, efficient, fair, and reliable;
- ensuring the correct data is communicated to all affected parties in a timely manner;
- providing for consistent, transparent, and enforceable processes;
- establishing more transparency of the full costs of balancing and reconciling gas; and
- providing for more accurate identification and fairer allocation of the amount of unaccounted for gas.

6.165 The publication of daily gas gate information would be a first step towards greater transparency. The costs of such publication are likely to be minimal (as Gas Industry Co understands transmission networks currently provide this information on a daily basis to the Allocation Agent and that Vector has agreed to publish this information via OATIS) and there are some clear benefits which would arise from publication (as highlighted in the June Discussion Paper and submitter responses).

6.166 Some submissions noted confidentiality would need to be considered or could be addressed by aggregating information. Other submissions thought the confidentiality

[16] See Contact's response to question 16 in its submission on the June Discussion Paper.

risks were overstated / insignificant and far outweighed by the benefits resulting from publication.

6.167 Gas Industry Co has considered further the confidentiality concerns and agrees that these appear to have previously been overstated. In the instances where there is only one or two large customers at a gas gate, such customers will usually tender for a gas supplier and as part of the tender process will disclose their gas usage. In the instances where there is only one or two gas retailers at a gas gate there are no clear policy drivers for restricting disclosure. While disclosure may provide some market share information, this in turn will likely help facilitate retail competition.

6.168 However, Gas Industry Co considers that disclosure of metered gas gate quantities alone is insufficient. A variety of other information needs to be disclosed to ensure the Regulatory Objective is met.

6.169 There are clear policy drivers for publication of UFG data. For a start, disclosure of UFG data is necessary to properly update loss factors. Also, a number of submissions state or suggest that UFG levels are currently untenable. Gas Industry Co understands that UFG on a gas gate in a single month has been calculated as high as 13% and as low as -10%. This suggests major errors in the reconciliation process. Before you can fix a problem, you first need to recognise it. Publication of UFG data is thus a key first step towards minimising losses.

6.170 Gas Industry Co considers that allocation information (initial, interim and final) should be published on a per gas gate basis as follows:

- quantity of UFG associated with that gas gate; and
- total gas allocated to each retailer (aggregated to a monthly figure).

6.171 The publication of this information is of value to the entire industry. Publication represents a large leap from the status quo, but is comparable to the information that is published in the electricity industry.

6.172 However, publication alone is insufficient to minimise gas losses. Gas Industry Co considers it is appropriate for the reconciliation arrangements to also allow for investigation into the causes of any anomalous UFG percentages. As discussed in paragraph 8.26, Gas Industry Co considers the terms of appointment of the Allocation Agent should enable the Allocation Agent to be able to report on and, where considered appropriate, investigate the reasons for any unusual UFG percentages.

Options / Preferred approach for delivering the Regulatory Objective

6.173 The current lack of transparency is not meeting the Regulatory Objective. In addition to the publication of loss factors proposed in paragraph 6.90, Gas Industry Co considers that to meet the Regulatory Objective:

- daily gas gate metered quantities should be published daily;
- UFG allocations (initial, interim and final) should be published on a per gas gate basis;
- total aggregated monthly gas allocated to each retailer (initial, interim and final) should be published on a per gas gate basis.

Q13: *Do you agree with the preferred approach of publishing gas gate, UFG and specified allocation information?*

Summary of options / preferred approach for delivering the Regulatory Objective

6.174 The analysis in this section supports the adoption of numerous measures to improve data quality. These measures are summarised in Table 3.

Table 3: Summary of preferred approach to improving information quality issues

Broad issue	Specific problems	Preferred approach to deliver Regulatory Objective
Inputs used in the allocation process	Lack of standardised file formats and data requirements	• Establish a Gas Data Formats Group to develop, and later review (as and when appropriate), standardised file formats and forward to Gas Industry Co for approval and publication. • Require participants to comply with the standard file formats (if any) published on Gas Industry Co's website.
	Inconsistent estimation methodologies	• Introduce estimation accuracy criteria. The proposed criteria will assess on a rolling basis the accuracy of the data provided initial allocation for allocation groups 3 to 6 on each gas gate aggregated over a rolling 3 month period with the comparable data provided for final allocation. The initial allocation data is required to be within +/- 2% of the final allocation data. • Provide that normalised data be submitted for allocation groups 3 to 6 for each calendar month. Data is to be normalised on a simple pro-rated basis unless a different approach is authorised by Gas Industry Co. • Not introduce a single methodology for forward-estimates at this time, but maintain a watching brief in this area.
	Issues regarding the use of metering devices	• Require 95% of each retailer's allocation group 5 and 6 meters at each gas gate to be read within each gas year quarter and 100% within each gas year. • Require retailers to comply with NZS 5259:2004. Retailers should raise with Standards New Zealand any concerns regarding the inadequacy of that standard.
	Irregular updating of loss factors across distribution networks	• Require loss factors to be annually updated each gas year on a per gas gate basis. Each updated loss factor should apply to all allocation groups at the gas gate and should apply from the start of the gas year. • Distributors should annually calculate updated loss factors and provide these (and the supporting calculations) to Gas Industry Co by 1 July. There will be no mandated process for this calculation but the aim is a loss factor that is likely to result in an accurate estimation of the expected losses

Broad issue	Specific problems	Preferred approach to deliver Regulatory Objective
		for the period to which the loss factor will apply. • Require publication by Gas Industry Co of updated loss factors and the calculations supporting those loss factors. • Industry participants must notify the distributor and Gas Industry Co within 2 weeks of publication if they consider the proposed loss factor is inappropriate and, in such circumstances, Gas Industry Co will determine the updated loss factor. Gas Industry Co will use reasonable efforts to publish the updated loss factor by 1 September. • If there are continued issues regarding the setting of loss factors, Gas Industry Co will establish a work stream to consider introducing a standardised process.
Quality and reliability of allocation information	Inadequate timeframes	• Retain the current timelines for monthly allocation, but excuse the Allocation Agent from any failure to deliver allocations on time if the Allocation Agent used reasonable care and skill.
	Customer switching and lack of a central registry	• Once switching and registry arrangements have been implemented, consider whether additional changes are required. • Include exemption and transitional provisions to cover any issues faced by industry participants complying with the arrangements prior to the central registry go-live date.
	Lack of effective incentives to provide accurate information and lack of mandatory performance criteria	• Require all industry participants to submit accurate data to the Allocation Agent and comply with all applicable data submission requirements.

"Wash-ups" and corrections	"Wash-up" timeframe inappropriate	• Avoid use of term "wash ups" which may imply a financial settlement.
		• Introduce rolling revisions as follows:
		  • 4 month "interim allocation" (i.e. initial month plus 3 months);
		  • 13 month "final allocation" (i.e. initial month plus 1 year);
		  • these allocations will have no materiality threshold (i.e. all errors will be reallocated no matter how small).
		• Require all participants to submit revised data for both the interim and final allocations.
		• Require that data submitted for the final allocation include actual data or 100% historic estimated / normalised data.

	Ad hoc corrections	• Remove current ad hoc correction process but retain ability for Allocation Agent to correct allocation information (of any

Broad issue	Specific problems	Preferred approach to deliver Regulatory Objective
	problematic	allocation - initial, interim or final) within one working day of its publication if a manifest error is discovered.
Transparency	Lack of transparency / too much confidentiality	• In addition to the publication of loss factors noted above, require: • daily publication of daily gas gate metered quantities; • publication of UFG (initial, interim and final) on a per gas gate basis; and • publication on a per gas gate basis of total aggregated monthly gas allocated to each retailer (initial, interim and final).

6.175 Gas Industry Co considers that mandating the preferred approach in Table 3 would better achieve the Regulatory Objective. In particular by:

- helping ensure more accurate and efficient downstream allocation;
- better ensuring that the provision and disclosure of data and information is safe, efficient, fair and reliable;
- allowing data exchange protocols across the industry to be standardised and better ensuring appropriate data is communicated to affected parties in a timely manner;
- helping facilitate retail competition; and
- providing for more accurate identification of the amount of UFG.

6.176 In relation to each measure proposed, it is acknowledged that further changes may be required as the gas industry evolves. As discussed in section 9 below, the governance structure of any new arrangements will need to ensure that the arrangements can be appropriately reviewed and amended over time.

6.177 It is also anticipated that there may be instances where participants will require time to modify their systems and occasions where participants should be exempt from certain provisions. This means that transitional provisions and provisions allowing the granting of exemptions should also be included in any new arrangements.

6.178 Improving information quality requires mandatory reconciliation arrangements. However, the measures summarised in Table 3 could be implemented in any mandatory arrangement (such as a pan-industry agreement or regulatory solution). The choice of policy instrument needs to take into account the whole downstream reconciliation regime. Factors relevant to the choice of policy instrument are discussed further in section 12.

7 Problem Area 2 – Allocation methodologies and UFG

What the June Discussion Paper said about this area

7.1 The June Discussion Paper discussed this area under the heading "Inequitable allocation of UFG variations to the incumbent retailer". In that paper the issue was described as follows:

"8.10 As outlined at paragraph 4.31, the "difference" method of allocation effectively allocates variations in UFG to the incumbent retailer. At the time the Reconciliation Code was drafted in 2000, incumbent retailers were identified for each shared gas gate, based on their market share at that time. Industry changes and customer transfers since that date means that some incumbent retailers do not now have the majority of market share at gas gates, both in terms of ICPs and volume. This can result in unfair and inefficient allocations of variations in UFG.

8.11 It is proposed to require the global method of allocation to be applied uniformly across all gas gates. Use of the global method, and allocating UFG variations based on each retailers' volumes on the distribution network would more accurately reflect the true costs for each retailer.

8.12 While it would be preferable for all participants to move quickly to global allocation arrangements, the Gas Industry Co notes that retailers may require some time to adjust their own systems and data to accommodate such a change. It is proposed to recognise this issue in any commencement date for mandatory global allocation.

8.13 The Gas Industry Co also envisages carrying out further work in the longer term to determine whether improvements can be made in UFG allocations."

7.2 The June Discussion Paper sought submissions on the following questions:

- Question 6 – Does the use of the "difference" allocation method and the resulting implications for the allocation of UFG variations create a substantial problem in the industry?
- Question 7 – If there are problems with the allocation of UFG variations, is working towards mandatory global allocation an appropriate response for the Gas Industry Co?

What submissions on the June Discussion Paper said

7.3 The submissions on the June Discussion paper were varied. Most submitters considered the differencing methodology is causing substantial industry problems and supported a move to a global methodology.

7.4 Five submissions (Contact, Genesis, Nova, Powerco and Tom Tetenburg and Associates Ltd) agreed that the difference method was creating substantial industry problems. These submissions highlighted that the difference methodology is more likely to result in a disproportionate share of UFG when an incumbent's market share drops and stressed that a difference methodology would result in more equitable outcomes if data quality issues were addressed. However, Nova's submission did note that there are some cost benefits to incumbents under a difference methodology (e.g. lower levels of compliance regarding meter reading obligations).

7.5 Mighty River Power, Gas Net, Wanganui Gas and Vector either supported the difference methodology (for example, because it results in a much simpler allocation process), did not have a view or believed accuracy of data was the root cause of the problem.

7.6 In relation to whether working towards global allocation would be appropriate:

- five of the submissions generally supported the move to global (Contact, Genesis, GasNet, Powerco and Tom Tetenburg and Associates Ltd). These submissions noted that global allocation is the best mechanism to deliver equitable allocation of losses. The submissions made various comments on the specifics of the global methodology, e.g. some supported the 1 month UFG method rather than the global method set out in the Reconciliation Code.
- two submissions (Vector and Mighty River Power) supported the retention of the difference methodology. However, both submissions noted improvements that should be made relating to the underlying causes for the current discrepancies. Changes that were suggested included improving data quality improvements, requiring all parties to submit data ("global submission"), ensuring better compliance and increasing visibility of volumes traded (to encourage accuracy improvements).
- Wanganui Gas' submission queried which global allocation methodology would be applied, noted that the accuracy of the data provided may be more important than the methodology and suggested that Gas Industry Co should consider mandating a single estimating methodology to bring consistency.
- Nova believed that the differencing method should be an option for retailers (for example, where it is efficient in terms of the trading volumes at a gas gate), but noted problems with UFG calculation occur if the incumbent retailer does not submit data.

7.7 The submissions also discussed whether it is important for 12 month rolling loss factors to be used in the allocation process. The submissions on this issue suggested this is an issue about data quality that is important regardless of whether the global or difference allocation method is adopted. Accordingly, submissions on this issue are discussed above in paragraphs 6.70 to 6.90.

Further analysis

Global or difference

7.8 As discussed in paragraph 6.124, Gas Industry Co considers that there should be a requirement for all participants (including incumbents) to provide allocation information. This is necessary to enable accurate UFG calculation and disclosure. In other words, Gas Industry Co considers that "global submission" of data should be required. Assuming global submission of data, the question becomes how to appropriately allocate UFG.

7.9 The current arrangements are not achieving the Regulatory Objective and are difficult to enforce. Leaving the decision of the allocation methodology to the parties at a gas

gate will not necessarily result in the most efficient allocation methodology being chosen.

7.10 Enforcement and compliance is also a major issue under the current arrangements. Under a strict reading of the Reconciliation Code, if parties entering into an allocation agreement are unable to agree the allocation methodology within a reasonable time, the Allocation Agent determines the methodology (having regard to the core principles in the Reconciliation Code). However, in practice the difference methodology appears to be the default position.

7.11 Difference by default may be due to a provision in the model agreement (attached as Appendix E to the Reconciliation Code) which provides that:

"The Difference method of allocation is to apply unless [Incumbent Retailer] (as the party measured by difference) decides at its discretion to change to the Global method of allocation for any or all of the shared Receipt Points. Any such change may only commence from the beginning of a month."[17]

7.12 Enforcement of this clause also appears to be difficult in practice. Gas Industry Co understands that the two retailers with the greatest levels of incumbency have both previously endeavoured to change from difference to global and have been unable to achieve this due to industry resistance.

7.13 As the market diversifies, it is easy to envisage circumstances where the difference methodology is inappropriate. There are already some gas gates where this is plainly obvious. For example, Gas Industry Co understands there are some gas gates where the "incumbent" retailer no longer has any customers.

7.14 Not all submitters support a move away from a difference methodology. For example, Mighty River Power supported a difference approach on the basis that it is then in the interests of the incumbent retailer to resolve issues that arise and is a simpler allocation process.

7.15 While allocating UFG to the incumbent may be a "simpler" process, this does not mean it is more efficient. Although the calculations for allocating UFG to each retailer are slightly more complex, they are no more costly or time consuming (as spreadsheets perform the calculations). Also, the incumbent retailer will only be able to resolve issues related to its own customer base that give rise to UFG. If non-incumbent retailers are contributing to UFG (for example by supplying incorrect data, meter readings and other inaccuracies) then it seems efficient for them to be apportioned some of the UFG. This would create an incentive on those retailers to resolve issues contributing to UFG.

7.16 Other submissions note that global allocation is a fairer process (for example, Contact states "Global allocation is the most sensible mechanism to deliver equitable allocation of losses"[18]).

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[17] See clause 1 of Schedule 3 to the Model Allocation Agreement, which is Appendix E to the Reconciliation Code.

[18] See Contact's response to question 7. It should be noted here that Contact's comment was conditional on a "1 month UFG" type global process being used, rather than a global process similar to that in the Reconciliation Code.

7.17 The fairness of "global" depends in part on the type of global method implemented. A number of submitters have supported the current "1 month UFG global" over the global methodology detailed in the Reconciliation Code.

7.18 One gas gate where the 1 month UFG global method is applied is the Pahiatua gas gate. Gas Industry Co understands that a very significant proportion of the load at this gas gate relates to the usage of a large dairy factory (i.e. greater than 90% of the load). Apparently, the factory switched retailers and accordingly the "incumbent's" market share at the gate dropped significantly. Under the difference method, the "incumbent" was allocated with all of the UFG from the site (including UFG "caused" by the dairy factory), which due to its small market share at that gas gate was untenable and unfair. Under the Reconciliation Code global methodology, the incumbent would still have been apportioned with all of the dairy factory's UFG (as the Reconciliation Code global methodology does not allocate any UFG to customers with TOU devices). Both cases result in an inequitable outcome and fail to facilitate retail competition. On the other hand, the 1 month UFG method results in a more equitable outcome by distributing UFG across all allocation groups (TOU and non TOU).

7.19 No doubt it is possible to also find extreme examples that highlight where the Reconciliation Code global methodology is more appropriate than the 1 month UFG global method. Also, it may be arguable that a "half way house" approach would be suitable (e.g. that TOU devices are allocated with some UFG but, to recognise the increased accuracy of TOU devices, less UFG than other allocation groups).

7.20 All of the gas gates where a global method is currently adopted use a "1 month UFG global" methodology. Designing a different methodology would likely require a significant amount of analysis.

7.21 Accordingly, Gas Industry Co considers that if a "global" method is to be used this should be a "1 month UFG global" method. However, any revised arrangements should include a suitable amendment process which would allow consideration of whether a revised global method should be developed which apportions loss differently to different allocation groups, rather than equally to each group.

7.22 A related question is whether there should be one mandated allocation methodology or retained flexibility for different gas gates to adopt a different method. For example, Nova's submission supports the difference method being an option for retailers and suggests it may be more appropriate in some instances, due to the nature of trading volumes. However, other submissions support a single estimation methodology being mandated.

7.23 The increased efficiency of the difference method noted by Nova is largely a consequence of incumbents not being required to submit accurate data. Much of this perceived "efficiency" is less evident following an introduction of a requirement for "global submission" of data.

7.24 In Gas Industry Co's view there are limited situations where a difference method may result in an equitable distribution of UFG (i.e. where there is only one retailer at a gas gate or possibly where the incumbent retailer has the vast majority of the market share of a gas gate) and, in practice, the 1 month UFG global method will not result in substantially different allocations in these circumstances.

7.25 International approaches to this issue are also useful. The HP Invent Report highlighted this area as one of the main areas where the approach in New Zealand differs from international norm. New Zealand retailers enjoy unusual flexibility in terms of choosing the method used for downstream allocation. The HP Invent Report stated "This may reflect New Zealand's cultural preference for decentralised approaches – compared to the other markets reviewed".

7.26 The HP Invent Report noted many international jurisdictions (i.e. Great Britain, Ireland, NSW and SA/WA) have adopted a global approach for initial allocation. Of the markets surveyed only Victoria and New Zealand use a difference method. Page 19 of the report stated:

"Great Britain has adopted the most complex approach – involving global allocation, 2nd order demand modelling and sampling-based model estimation. Of course, it is also by far the largest market and so can more easily justify a more sophisticated approach.

NZ is at the other end of the spectrum …

In general, the choice of method should depend upon a number of factors:

- *the size of the market, and hence the number of customers/GJ over which the fixed overheads of a particular method can be spread;*
- *the size and volatility of the weather component of demand compared to the non-weather component*
- *the market share of the host retailer: where this share is small, using a difference model with no weather modelling may place undue risks on the host retailer and so a global method and/or weather modelling is likely to be used*
- *the way in which the initial allocation is used in determining transportation and balancing charges."*

7.27 Currently in New Zealand inaccurate reconciliation and confusion regarding reconciliation processes and methodology is limiting competition. Introducing fair, consistent and equitable processes are likely to assist competition, particularly where the introduction is unlikely to result in significant cost increases. A single, efficient, fair process will give increased certainty to existing retailers and any new entrants.

7.28 Taking into account the analysis above, Gas Industry Co considers the best option for meeting the Regulatory Objective is mandating the 1 month UFG global methodology for all gas gates.

7.29 To the extent that any changes to existing systems are required, Gas Industry Co considers the proposed implementation time frame (of at least 6 months) and transitional or exemption provisions will be able to address any significant retailer concerns.

Month end daily allocation service

7.30 Clause 6.9 of the Reconciliation Code currently provides for three types of allocation services: Day End Estimated Energy Information Service; Month End Daily Energy Allocation Service; and Month End Monthly Energy Allocation Service.

7.31 Gas Industry Co understands that in practice the Month End Daily Energy Allocation Service is by far the preferred service and that the other services are seldom, if ever, used.

7.32 In relation to the Day End Estimated Energy Information Service, Gas Industry Co has detailed above (see paragraph 6.173) that its preferred approach is to require daily publication of metered gas gate quantities. This publication, combined with retailers' own records and other data improvements, will reduce the utility of a Day End Estimated Energy Information Service. This fact was acknowledged in the submission received from Tom Tetenburg and Associates Ltd.[19]

7.33 Gas Industry Co understands the Month End Monthly Energy Allocation Service has never been used. In any event, any retailer could derive monthly information by aggregating the information provided through the standard Month End Daily Energy Allocation Service.

7.34 Given the limited utility of both the Day End Estimated Energy Information Service and Month End Monthly Energy Allocation Service, Gas Industry Co does not consider it necessary for mandatory arrangements to include these allocation services. If retailers want this information, they will likely be able to negotiate directly with the Allocation Agent for this information to be collated and reported. Any terms of appointment of an Allocation Agent should not prevent the Allocation Agent performing such an optional service.

Options / Preferred approach for delivering the Regulatory Objective

7.35 Gas Industry Co considers that the difference methodology is failing to meet the Regulatory Objective on many shared gas gates.

7.36 To achieve the Regulatory Objective (i.e. to achieve consistent, efficient and fair processes that facilitate competition) Gas Industry Co's view is that the best option for meeting the Regulatory Objective is mandating a "1 month UFG global" method of allocation.

7.37 The rule change or amendment provisions of any new arrangements should allow consideration of whether the 1 month UFG global method should be altered in the future. For example, by allocating less UFG to allocation groups 1 and 2 (that use TOU devices) compared to the other allocation groups.

7.38 Gas Industry Co does not consider that the retention of the Day End Estimated Energy Information Service or Month End Monthly Energy Allocation Service is necessary to meet the Regulatory Objective. It is proposed that these services will not be covered by the mandatory reconciliation regime at this time, but that participants would be able to negotiate directly with the Allocation Agent if they wished to acquire such services.

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[19] Tom Tetenburg and Associates Ltd's response to the question "*Should all gas gate daily metered quantities be published daily?"* was *"This would alleviate the need for a Daily Info Service from the Alloc Agent. The downside is the loss of confidentiality about what other retailers are trading at the gates"*.

7.39 To the extent that any changes to existing systems are required, Gas Industry Co considers the proposed implementation time frame and transitional or exemption provisions will be able to address any significant retailer concerns.

7.40 Gas Industry Co's preferred approach for meeting the Regulatory Objective in relation to allocation methodologies and UFG could likely be achieved through any mandatory policy instrument (pan-industry agreement or rules). The choice of policy instrument needs to take into account the whole downstream reconciliation regime. Factors relevant to the choice of policy instrument are discussed further in section 12.

Q14: *Do you agree with the preferred approach of mandating the I month UFG global method?*

Q15: *Do you agree that the mandatory downstream reconciliation arrangements should not include the day end estimated allocation service and month end monthly allocation service?*

8 Problem Area 3 – Appointment of Allocation Agent

What the June Discussion Paper said about this area

8.1 The June Discussion Paper described this area as:

"8.7 The [Vector Transmission Services Agreement] requires shippers at a shared gate station to enter an allocation agreement. This allocation agreement must name the allocation agent who is to apply the agreed allocation methodology. The allocation agreement must also contain the terms of appointment of the allocation agent.

8.8 The need for all parties using a gate station to agree on an allocation agent can cause difficulties or delays in some circumstances. For example, when the period of appointment for an allocation agent expires the parties shipping gas to the gate station must again agree who to appoint as the allocation agent. If there is any disagreement, the appointment of an allocation agent cannot take place and this can delay the completion of the annual reconciliation conducted in October each year.

8.9 It is proposed to implement a regime where the Gas Industry Co becomes the single industry body responsible for appointing an allocation agent (or allocation agents)."

8.2 The June Discussion Paper also stated that a single party (Tom Tetenburg and Associates Ltd) currently provides all downstream allocation and reconciliation services to the New Zealand gas industry and where unanimous agreement cannot be reached responsibility for undertaking these functions rests with the network owner.

What submissions on the June Discussion Paper said

8.3 In general, submitters agreed that the current process for Allocation Agent appointment is problematic and should be reviewed. In particular:

- six of the submissions agreed that the current process is problematic or knew of occasions where difficulties had arisen. The remaining three submissions (Wanganui Gas, GasNet and Mighty River Power) were not aware of any issues to date, but noted that there is currently only one Allocation Agent which makes it less of an issue;
- four of the submissions noted problems that occur by requiring unanimous decision on the appointment of an Allocation Agent e.g. that one party can disrupt the appointment process. Two submissions discussed that the backstop position (for the distributor to provide the service or appoint the Allocation Agent) is not ideal; and
- two submissions (Genesis and Powerco) discussed the disadvantages of having multiple Allocation Agents (such as added complexity and cost), and problems with confidentiality and inappropriate industry interests influencing the Allocation Agent appointment process.

8.4 In the June Discussion Paper, Gas Industry Co suggested implementing a regime where Gas Industry Co becomes the single industry body responsible for appointing an Allocation Agent or Agents. In response to this:

- three submissions agreed. Genesis elaborated that it is critical industry participants are closely involved in the appointment process and that Gas Industry Co should essentially act as the industry's agent, with any selection and/or appointment process ensuring the appointment is clearly prescribed, the Allocation Agent is independent with a high level of accountability and that costs are minimised. Genesis would expect clear and strong enforceable rights against the Allocation Agent, and strong accountability of that agent back to industry participants.
- a further three submissions agreed in part. For example, Vector considered this should be a fallback position if industry agreement is not reached, and Nova submitted that Gas Industry Co's role should just be an oversight role until industry arrangements prove impractical or contentious. Tom Tetenburg and Associates Ltd agreed that a Gas Industry Co role is an option (particularly if the Allocation Agent also has authority to seek information and to resolve problems) or that a possible alternative could be the majority of retailers/shippers deciding on the Allocation Agent appointment (either by number of ICPs or by GJ load).
- Contact's preferred option was for a single party to contract with the Allocation Agent and monitor performance with allocation and reconciliation arrangements determined under the umbrella of Gas Industry Co, suggesting this could be achieved by providing for it in Vector's Transmission Services Agreements.
- Wanganui Gas was neutral provided the process was contestable, transparent and produced a similar cost structure; and
- GasNet expressed concern that the changes might result in increased compliance costs and that changes would only be necessary if there was evidence or high risk of retailers not agreeing.

8.5 E-gas did not make a submission on the June Discussion Paper. However, in a letter to Gas Industry Co dated 6 January 2006, e-gas noted that:

"…There is only one allocation agent and the whole industry is reliant upon his interpretation and technology based on the current Reconciliation code. This vulnerability is totally unacceptable and requires immediate review.

The obvious solution would be for each network company to be responsible for allocation on their network, to put in place a transparent and robust methodology and for any imbalances to be dealt with between the participating retailers."

Further analysis

8.6 Following the receipt of submissions on the June Discussion Paper, a number of allocation agreements expired on 30 September 2006 and the industry was required to renegotiate and execute revised allocation agreements. Gas Industry Co understands that industry agreement was not able to be reached prior to the start of the gas year and believes that ultimately the network companies determined the terms of Allocation Agent appointment, namely appointment of Tom Tetenburg and

Associates Ltd on a six month term. This six month term is shorter than previous allocation agreements, which have provided for a 2 year term. The six month term is likely to result in a number of inefficiencies (including a waste of industry resources renegotiating allocation agreements in the short term future and an increase in Allocation Agent charges resulting from a less certain tenure).

8.7 The submissions on the June Discussion Paper and the recent difficulties with appointing an Allocation Agent for the 06/07 reconciliation year both strongly suggest that the current Allocation Agent appointment process is inefficient, unreliable and failing to deliver the Regulatory Objective or desired industry outcomes. Further, the potential for increased complexities and commercial impasses will increase if more than one Allocation Agent begins offering allocation services in New Zealand.

8.8 The HP Invent Report highlighted this area as one of the main areas where the approach in New Zealand differs from international approaches. That report noted that New Zealand retailers enjoy unusual flexibility in terms of the person who undertakes downstream allocation stating "This may reflect New Zealand's cultural preference for decentralised approaches – compared to the other markets reviewed".

8.9 The current appointment process means that there is the potential for the Allocation Agent to be on different commercial arrangements for each of the different networks and potentially for each different gas gate. It is likely to be inefficient for a market of New Zealand's size to support such complex arrangements. A streamlined approach which results in minimum duplication of work is likely to be more efficient.

8.10 While unanimous appointment has some advantages in an ideal world (i.e. ensuring all parties to a gas gate are happy with the arrangements), it is impracticable and the disadvantages (cost, uncertainty and delay) outweigh the benefits of total agreement.

8.11 Also, if multiple Allocation Agents begin offering services, it will be important to ensure that there is not inefficient duplication of work or unnecessary cost / complexity. The current process leaves little room for such issues to be considered at an industry wide level. To facilitate retail competition, it is important that decisions on crucial aspects of the reconciliation regime allow resolution of such issues to be able to take into account whole of industry concerns and perspectives.

8.12 Gas Industry Co's view is that a downstream market of New Zealand's size does not currently support the appointment of multiple Allocation Agents. It is however important that the terms of appointment of any single Allocation Agent suitably protect industry interests. For example, the terms will need to be transparent and ensure independence and accountability. Longer term there also needs to be consideration as to whether it is efficient to continue to have separate downstream and upstream Allocation Agents. Again, appointment of the downstream Allocation Agent by unanimous agreement of retailers is likely to be unable to efficiently consider such decisions. Retailers might be motivated by commercial drivers, rather than industry wide considerations (e.g. increased efficiencies to transmission operators and distributors).

8.13 As unanimous agreement of retailers is not meeting the Regulatory Objective, it is necessary to consider alternative options. The June Discussion Paper proposed one option (appointment by Gas Industry Co) and submissions have proposed some additional options including:

- Allocation Agent appointment by a majority of retailers (either by load or ICP number);
- Allocation Agent appointment by Gas Industry Co only if industry fail to agree; and
- Allocation Agent to either be, or be appointed by, the network owner if industry fails to agree.

8.14 Gas Industry Co considers that appointment by a majority of retailers is unlikely to overcome the current hurdles nor achieve the Regulatory Objective. There would still be the ability for a commercial impasse. Also, where an incumbent represented the majority (by load and ICP number) this would essentially allow one party a discretion to appoint whoever they wanted as Allocation Agent (which could be influenced by bias and other inappropriate factors). Lastly, the process could still result in delays and uncertainty.

8.15 Appointment by Gas Industry Co as a fallback option is an improvement. However, such a process would still result in delays and uncertainty. Also, where retailers do reach agreement there is no guarantee that whole of industry issues will be appropriately considered. Appointment by network owners is similarly flawed.

8.16 Gas Industry Co considers appointment by a third party is necessary to ensure that the appointment is on appropriate terms and properly takes into account whole of industry issues. Appointment by a third party will also help establish more transparency of the full costs of balancing and reconciling gas.

8.17 The Gas Industry Co is just one possible option for a third party appointer. However, there are likely to be efficiencies with this option due to the oversight role that Gas Industry Co has in developing reconciliation arrangements and the longer term reconciliation reviews Gas Industry Co is likely to perform (such as consideration of upstream reconciliation issues). Accordingly, Gas Industry Co's preferred approach if for it to appoint the Allocation Agent.

8.18 Some thought has been given as to how the appointment process may be structured. The Reconciliation Code includes a number of provisions regarding an Allocation Agent's obligations and rights (see clauses 6.7 and 6.8 in particular). A number of these matters will need to be replicated in any appointment agreement. For example, the Reconciliation Code appointment provisions require that the Allocation Agent:

- acts in a neutral and non-discriminatory manner in its dealings with all participants;
- does not disclose confidential information except as required or as consented to;
- must provide information to an auditor when requested;
- ensures its employees or agents are bound by the same confidentiality obligations and neutrality obligations;
- has reasonable, cost reflective charges; and
- maintains tidy, full and complete records and must, on termination, provide any new Allocation Agent with a full set of all input and output files and data relating to

the relevant Receipt Points which are held by or under the control of the new Allocation Agent.

8.19 The current allocation agreements provide that the Allocation Agent is not liable except in the case of wilful default or negligence. Liability of the Allocation Agent is discussed further in paragraphs 10.49 to 10.58.

8.20 Currently there is no transparency regarding the full costs of balancing and reconciling gas. Gas Industry Co considers that the Allocation Agent's standard charges should be published. This will be of benefit to any new entrants and would help achieve one of the stated policy aims in the Regulatory Objective (i.e. establishing more transparency of the full costs of balancing and reconciling gas).

8.21 Gas Industry Co envisages that a service provider model and appointment process similar to that used in the electricity industry would be appropriate. Such a process would also be similar to the registry operator appointment process Gas Industry Co has proposed in the switching and regulatory work stream.

8.22 This possible process would require Gas Industry Co tendering for the appointment on clear, transparent criteria. One key aspect will be the appointment term. The appointment term needs to give appropriate certainty to industry but not lock in arrangements for an inefficient period. A short period will be inefficient due to the need to recover the costs of a tender process. For example, Gas Industry Co considers the current 2 year term would be too short.

8.23 A longer term is often more attractive to service providers and is more likely to generate interest from parties that have not previously provided allocation services. For example, any new service provider would need to invest in suitable systems (in particular, software) to perform allocation functions. A longer term allows the service provider to amortise this cost over a longer period and be more price competitive with service providers that have existing systems (and only need to cover ongoing costs, rather than investment costs). However, there are risks with too long a term. For example, because changes to upstream reconciliation arrangements may occur.

8.24 In the electricity industry the reconciliation agent position is potentially only tendered every eleven years (a 5 year initial term with the ability for two 3 year extensions at the Electricity Commission's discretion). Gas Industry Co considers, given the state of development of the gas industry, a term of this length would be unsuitable.

8.25 Taking the above factors into account, Gas Industry Co's preferred approach is to tender for appointment on the basis of an initial 5 year term. Any appointment should be flexible enough to allow for renegotiation of certain terms in the event of key industry events (such as changes to upstream reconciliation).

8.26 As well as performing allocations, the terms of Allocation Agent appointment contract should also provide that the Allocation Agent will report on compliance with the rules (both its compliance and any breaches of the rules by participants that the Allocation Agent is aware of or suspects) and provide other information and reports requested by Gas Industry Co (for example, reports on unusual UFG percentages and the reasons, if known, for such anomalies). The appointment should allow Gas Industry Co and industry participants where appropriate (such as a request for day end daily allocation service information) to request (probably on a time and materials basis)

additional reports and information or to ask the Allocation Agent to investigate certain issues (e.g. the causes of anomalous UFG percentages).

Options / Preferred approach for delivering the Regulatory Objective

8.27 The current appointment process is ineffective and causing considerable industry cost, delay and frustration. To meet the Regulatory Objective and achieve suitable industry outcomes Gas Industry Co's preferred approach is appointment of a single downstream Allocation Agent by Gas Industry Co.

8.28 At this stage, Gas Industry Co's preferred approach is a service provider model similar to that used in the electricity industry with the initial tender covering appointment for all gas gates on a five year term.

8.29 Gas Industry Co considers that the preferred approach could be given effect to in a variety of policy instruments (such as a pan-industry agreement or rules). The choice of policy instrument needs to take into account the entire allocation and reconciliation regime and is discussed further in section 12.

Q16: *Do you agree that Gas Industry Co should appoint the Allocation Agent using a service provider model similar to that used in the electricity industry? Do you agree that the initial appointment should be for a 5 year term?*

9 Problem Area 4 – Governance

9.1 The term governance is used to describe the processes and structures for governing a set of arrangements. This typically includes:

- the role and scope for any governing body that oversees the arrangements;
- the process for appointing or electing members of that governing body;
- the extent to which the arrangements apply to various participants;
- the means by which changes are made to the arrangements;
- the nature of the mechanisms binding participants to the arrangements; and
- the means by which compliance with the arrangements is achieved.

9.2 Governance and compliance were discussed together in the June Discussion Paper. However, for this paper it is convenient to consider compliance separately from governance. Compliance is considered in section 10.

What the June Discussion Paper said about this area

9.3 The June Discussion Paper described governance in paragraphs 8.4 to 8.5 of that paper as follows:

"8.4 The Gas Industry Co is also concerned that the Reconciliation Code is not subject to regular reviews. Regular reviews of allocation and reconciliation arrangements are likely to prove beneficial given the dynamic evolution of the industry.

8.5 Under the Reconciliation Code, the National Allocation Group has an important governance role. The role includes determining dispute resolution processes (where the parties cannot agree on a process), appointing auditors to audit allocations, and facilitating an annual review of the Code. However, the Gas Industry Co understands that the National Allocation Group has never actually met or performed any functions under the Code."

What submissions on the June Discussion Paper said

9.4 The submissions on the June Discussion Paper largely agreed that the current governance arrangements are not working effectively. None of the industry participants submitted that the current arrangements are effective.

9.5 In particular:

- Vector noted that the National Allocation Group has never met;
- Contact agreed that the code modification processes are ineffective. Noting that it was difficult to effect a change when the Reconciliation Code Working Group was in place and since that group was disestablished in mid 2003 there has been no body to refer Code issues to or to address industry issues. Contact noted that an industry workshop in 2002 identified a lack of appropriate governance and that the

current processes lack rigour, are inefficient and are not achieving equitable outcomes;

- Genesis agreed that the current governance arrangements are not working as effectively as they could, noting that the Allocation Agent does not have sufficient backing to enforce the clauses contained in the Reconciliation Code. Genesis noted that difficulties with governance add additional transaction costs;
- Wanganui Gas and GasNet had no evidence of governance being ineffective. But Wanganui Gas did note that if it wanted to propose changes to the Code it would not know how to do this in the current environment;
- Nova agreed that governance was poor, modifications to the Code difficult to obtain (particularly if a minority of participants engage in hold out behaviour) and that effective audit and dispute resolution provisions are required; and
- Tom Tetenburg and Associates Ltd noted that the Code has not had any amendments, the National Allocation Group is unavailable and audits are problematic.

Further analysis

9.6 It is clear that the governance arrangements for downstream allocation and reconciliation can be improved. The current arrangements are ineffective and overly complex. The Reconciliation Code is not legally binding and includes "governance provisions" which have never been used. The process for amending the Reconciliation Code appears unworkable and the lack of any governing body taking responsibility for improving the Code is a key flaw.

9.7 Any reconciliation arrangements need to be binding on all relevant industry participants. This need was stressed in the June Discussion Paper. Paragraph 10.5 of that paper noted the significant risk of "free-riding" and/or "hold out" to the disadvantage of overall efficiency if the frameworks were voluntary. None of the submissions on the June Discussion Paper disputed that mandatory governance arrangements are required.

9.8 Meeting the Regulatory Objective and meeting industry requirements both need the development of more clearly prescribed governance structures. In particular, to meet the Regulatory Objective the arrangements should:

- bind all relevant industry participants (i.e. parties should not be able to contract out of the arrangements); and
- include reliable, timely, transparent and enforceable processes – for example, it should be clear what participants are required to do, how rule changes can be made, and who is responsible for advancing and developing the arrangements.

9.9 Broadly speaking there are two options for achieving mandatory governance arrangements – a pan-industry agreement or a regulatory (rules or regulations) approach. Both of these options could take a variety of forms.

9.10 Given the number of players in the industry and the intricacies of the reconciliation arrangements, any pan-industry agreement would be complex and would need to include the following governance structures:

- an independent governance body to oversee the processes and take responsibility for monitoring performance and improving the arrangements where necessary;
- a set of guiding principles which the governing body and participants must have regard to when overseeing and developing the arrangements;
- provisions to cover the appointment and role of the governing body, the resolution of disputes (see discussion on compliance in section 10), the funding of the processes, and the appointment and role of any secretariat support for the governing body;
- provisions detailing how decisions are made to change the rules and the voting rights of the parties to the pan-industry agreement. This may include different voting rights for different issues and could provide for some delegation to the governing body;
- a clear prescription of participants covered by the arrangements and how new parties become participants. In order to achieve an arrangement that is mandatory the arrangements would probably need to require participants to avoid relevant trading with persons who were not participants;
- a mechanism for transition from the current arrangements and the possibility of exemptions from compliance in some areas or for a transitional period;
- a means of enforcing compliance (compliance is discussed further in section 10).

9.11 Getting agreement on these matters is unlikely to be a straight-forward exercise, particularly due to the wide range of industry participants with obligations under the proposed arrangements – including retailers, distributors, meter owners, transmission owners, the Allocation Agent and Gas Industry Co. There are also other issues to consider. The likely difficulties obtaining agreement are explored further in section 12.

9.12 The HP Invent Report noted as one of the main differences between New Zealand and other jurisdictions the fact that code modification processes are not formally specified in the Reconciliation Code. The process for amending the rules will require careful consideration.

9.13 Amendments will often be technical in nature and will require considerable industry input. Inevitably there will be situations where unanimous agreement is inefficient, complex, time consuming or unobtainable. This point is reinforced by submissions which note the current difficulties in effecting a change under the Reconciliation Code.

9.14 Given the difficulties with unanimous agreement, any amendment process needs to allow for decisions to be made by a majority of industry participants or the governing body. To ensure long-term policy aims are met it may be more appropriate for the governing body to make certain decisions. The amendment process should also

allow the governing body to be able to request a cost / benefit analysis for any material changes to the arrangements.

9.15 The structure of the Reconciliation Code does not deliver the necessary governance arrangements. Accordingly, it is useful to examine other precedents from the energy industry. A relevant example of a pan-industry agreement is the Metering and Reconciliation Information Agreement (MARIA) developed to govern metering, reconciliation, deemed profiling and customer switching in the electricity sector.[20] The MARIA governance arrangements are summarised in Table 4.

Table 4: Summary of MARIA governance arrangements

Area	Description of MARIA arrangement
Governing Body	MARIA Governance Board ("MGB") – elected by participants in accordance with the provisions set out in Part 1 of the rules.
Structure of Rules	Rule book is divided into two parts: • Part 1 sets out the governance arrangements; • Part 2 sets out the detailed rules covering metering, reconciliation and switching.
Role of Board	MGB oversees and guides development in accordance with guiding principles. MGB makes decisions about "Part 2" rule changes. However, participants can overrule MGB in some circumstances.
Decision-making	Participants make decisions about changes to Part 1 of the rules with a two-thirds majority required for a change. MGB makes decisions about changes to Part 2 of the rules. Decisions by MGB may be confirmed by resolution if 25% of participants require it. Confirmation by resolution of participants requires a two-thirds majority (otherwise the rule changes are struck out). MARIA Compliance Committee (MCC) may strike out rule changes that do not comply with the guiding principles.
Rule change process	Any participant or MGB may propose rule changes. Participants may make submissions on rule change proposals. No direct cost / benefit analysis requirement, but application of guiding principles requires cost / benefit analysis for significant proposals.
Administrator	Administration Manager undertakes many functions and supports MGB.
Service providers	Reconciliation Manager and Registry Manager entered into contracts with the MGB on behalf of the industry.
Funding	Funded by participants according to a formula set out in the rules.
Participation	MARIA was initially established under pressure from government to establish retail competition. MARIA was effectively mandatory for retailers, distributors and meter

[20] The MARIA pan-industry arrangement was subsequently replaced by the Electricity Governance Regulations administered by the Electricity Commission.

Area	Description of MARIA arrangement
	owners because there was no viable alternative for reconciliation or switching.
Compliance and audits	Audits and compliance are discussed further in section 10. Rules are enforced by MGB, supported by Administration Manager. MCC makes rulings on disputes and breaches of the rules. Disputes between participants may be mediated or arbitrated. Any participant of MGB is able to claim a breach of the rules and all claims are to be investigated. Administration Manager may decide to take no action under some circumstances including if it considers the claimed breach is frivolous or vexatious. Administration Manager may resolve disputes using information mechanisms. Any informal resolution must be approved by the MCC. Administration Manager may audit participants on an ad hoc or regular basis. Any participant may request an audit of another participant.

9.16 The MARIA arrangements were introduced during a period in which government requested the industry to introduce arrangements that would better facilitate retail competition. Although MARIA was not mandatory, it was necessary for all distributors and retailers to have some means of measuring and reconciling customer quantities amongst retailers supplying customers in particular network regions. As the "only game in town" MARIA became the default arrangement.

9.17 A similar set of arrangements could be developed to provide a pan-industry agreement covering downstream reconciliation in the gas sector. To avoid unnecessary creation of governing bodies, it would be efficient to provide Gas Industry Co with key governance roles.

9.18 Alternatively, governing structures could be established under a regulatory framework. There are a number of structures and roles prescribed in the Gas Act which would simplify the design of regulatory governance arrangements. For example, it would be logical for Gas Industry Co (as the industry body) to be established as the governing body and oversee development of the reconciliation arrangements.

9.19 A comparison of the likely governance structures in a pan-industry agreement and regulatory arrangement are summarised in Table 5.

Table 5: Comparison of likely governance structures within a regulatory arrangement and pan-industry agreement

Area	Option A: Likely governance structures within a regulatory arrangement	Option B: Likely governance structures within a pan-industry agreement
Governing Body	Gas Industry Co Board	Governing board elected by participants (could agree to Gas Industry Co in this capacity)
Role of Board	To oversee development and make recommendations to the Minister of Energy	To oversee development and make recommendations to participants in accordance with guiding principles
Decision-making	Minister of Energy upon recommendation of Gas Industry Co	Industry participants according to decision-making process set out in the agreement. Participants could give Gas Industry Co authority to make decisions on some issues
Rule change process	Industry consultation by Gas Industry Co, cost / benefit analysis and formation of recommendation to Minister of Energy	Industry consultation by governing board followed by voting of participants. Participants may request cost / benefit analysis of key amendments
Administrator	Gas Industry Co	Could be Gas Industry Co
Funding	Funded by participants according to a formula set out in the rules	Funded by participants according to a formula set out in the agreement
Participation	Mandatory for all required participants	Collective boycott to enforce participation for all required participants
Compliance and Audits	Compliance and audits are discussed further in section 10. Rulings Panel and other elements established under Gas Act.	Compliance and audits are discussed further in section 10. Provisions enforced by governing body. Investigation and auditing functions set out in provisions. Rulings body appointed by and overseen by governing body.

9.20 Under either arrangement it will be necessary to consider how to appropriately fund the governance structures. Gas Industry Co considers that any funding arrangement should be tailor-made, so that the industry participants that obtain the most benefit from accurate and efficient downstream reconciliation bear the cost of the arrangements.

9.21 In relation to funding, Gas Industry Co's preliminary views are that:

- retailers will obtain the most benefit from the proposed improvements to reconciliation and, accordingly, should fund the cost. Allocating costs between retailers should be on the basis of the number of ICPs rather than by gas load. This is because the main benefits (e.g. improving information quality) are proportional to the number of customers rather than gas volume. However, Gas Industry Co will verify through the cost / benefit analysis its assumption that retailers obtain the key benefits of the arrangements;

- if a regulatory arrangement is implemented, funding should be covered by the reconciliation rules rather than through the levy process. This allows the design of tailor-made funding of the arrangements. Also, the reconciliation arrangements may require amendment over a reasonably short timeframe (e.g. six months) which it would be difficult to appropriately provide for in the levy methodology. A more flexible, tailor-made funding regime is desirable and this can best be achieved through inclusion of specific funding arrangements in the rules;
- many of the ongoing costs will be covered by the Allocation Agent's standard charges and invoiced directly to the relevant retailers; and
- funding issues specific to audits and compliance are discussed in section 10.

Options / Preferred approach for delivering the Regulatory Objective

9.22 The current governance arrangements in the Reconciliation Code are inefficient and unworkable. It is clear that better, mandatory governance structures are required.

9.23 There appear to be two possible options for delivering the Regulatory Objective, involving the inclusion of mandatory governance arrangements within either a regulatory regime or a pan-industry agreement (e.g. an agreement similar to MARIA). The key features of the possible options are detailed in Table 5.

9.24 Funding for the arrangements will need to be addressed in the reconciliation arrangements. Gas Industry Co's preliminary view is that:

- as retailers will obtain the most benefit through the proposed improvements to reconciliation, they should fund the arrangements; and
- costs should be allocated between retailers on the basis of the number of ICPs, rather than by gas load.

Funding for audits and compliance arrangements are discussed in section 10.

9.25 Identification of which options are reasonably practicable needs to take into account the whole reconciliation regime, rather than just governance issues. The appropriate choice of policy instrument (i.e. regulatory arrangement or pan-industry agreement) is discussed further in section 12.

Q17: *Is a pan-industry arrangement as described in this section the most appropriate alternative governance structure to the use of regulations and rules under the Gas Act? Which governance structures would you prefer (regulatory or pan-industry)?*

Q18: *Should funding of the reconciliation arrangements be covered by a process detailed in the reconciliation arrangements (rather than, for example, by the levy)? Do you agree with Gas Industry Co's preliminary view that the arrangements should be funded by retailers according to the number of ICPs?*

10 Problem Area 5 – Audits and Compliance

10.1 As noted in section 9, governance and compliance were discussed together in the June Discussion Paper. However, given the different issues involved these matters are discussed separately in this paper.

10.2 "Compliance" generally refers to all of the arrangements that incentivise and ensure that participants comply with their obligations under the reconciliation regime. A variety of the measures discussed in the sections above will help ensure better compliance, for example, mandatory information disclosure and introducing minimum estimation criteria.

10.3 This section focuses on three particular matters related to compliance:

- audits;
- the process for identifying when non-compliance (i.e. breach) has occurred and the process for determining the consequences of such a breach. These processes are collectively referred to as the "compliance regime"; and
- the ability to rectify or amend allocation information as a result of the findings of an audit or the compliance regime. This process is referred to as "special allocations".

Audits

What the June Discussion Paper said

10.4 The June Discussion Paper noted that the current downstream arrangements include provision for audits and that the National Allocation Group has important functions regarding the appointment of auditors. That paper stated:

"4.45 Parties may also request an audit of an allocation, and allocations may be revised following the results of the audit. Allocations are not normally revised as the result of an audit if they were performed more than 18 months prior to the request for the audit."

10.5 The June Discussion Paper did not specifically discuss problems with ineffective audits but did note that the National Allocation Group has never met or performed any functions under the Code.

What submissions on the June Discussion Paper said

10.6 Submissions highlighted a number of problems with the current audit regime. For example:

- Nova noted *"It is disappointing to note that an audit of several gates in the Lower North Island requested by an incumbent retailer was impeded by one retailers refusing to provide data as provided for by the Reconciliation Code. Given the contractual obligations for retailers to comply with the Reconciliation code, we believe that the auditor should be able to resort to legal action if necessary to obtain the required data. It may be that the drafting of the code and*

the contractual chain is not sufficient for this purpose and legal remedy is not currently a practical option."

- Tom Tetenburg and Associates Ltd noted that *"Audit requests for information are not taken seriously by some retailers. There is no authority given to anyone to unrestricted access of retailer billing systems info. Audits will have to continue until UFG is reasonable and/or incumbent retailers are satisfied with allocation by difference".*

- Powerco pointed to the Contact Energy Audit *"where the auditors' conclusions criticised participants who failed to provide the auditor with access to information deemed necessary to conduct the audit. The tone of the audit report illustrates the frustration of the auditor who was unable to compel compliance and was hamstrung by delays, lack of co-operation and incomplete information.*
  We note that the code allow for the parties to request an audit if required. We comment that normally the appointment of an auditor is made by the board of a directors of a company this is to ensure that an auditor is suitably qualified, independent of the company and has no conflicts of interest. Independence (or the perception of) is critical for all users of audit reports, thus we recommend that all future auditors be appointed by the GIC or, if not, majority consent of industry participants."

- Contact agreed that audit processes are ineffective and gas as an example *"Refusal by a participant to provide complete data to the auditor during a recent allocation audit initiated by Contact Energy. Furthermore the Code does not entitle the auditor to conduct investigative on-site work to identify or dismiss potential data quality issues."*

Further analysis on audits

10.7 There are detailed audit provisions in the Reconciliation Code. The inclusion of these provisions recognises the importance of audits in ensuring accurate reconciliation. Effective and appropriate audit arrangements form a key part of ensuring the Regulatory Objective is delivered.

10.8 It is important that any new arrangements include provisions that prescribe adequate arrangements for the performance of audits. As a starting point for the design of any audit arrangements it is useful to look at clause 16 of the Reconciliation Code which details numerous provisions related to the performance of audits. This clause indicates how the industry envisaged audits would work, even though the provisions have not been implemented (largely due to inadequate governance arrangements):

- Audit Principles – The Code includes three principles:
  - the first principle notes that an independent audit is the means by which the interests of all parties are to be protected without breaching confidentiality and that it is in the nature of allocation that errors or corrections which affect one party also affect other parties;
  - the second principle is that any party may request an audit of the procedures followed by the Allocation Agent and/or the results of any particular allocation; and
  - the third principle is that the party requesting the audit may be required to undertake to pay for the audit and provide security for the same.

- National Allocation Group appoints auditor – The National Allocation Group is to appoint an auditor (who is acceptable to and independent of, and not in a position of conflict of interest with, the requesting party or any of the affected parties), determine the terms of reference for the audit and obtain an estimated cost of the audit. The National Allocation Group must notify the requesting party and all affected parties of the name of the auditor, names of the requesting and affected parties, terms of reference for the audit and estimated cost.

- Obligation of parties – The Allocation Agent, the requesting party and each affected party are to provide to the auditor such information as the auditor may reasonably require for the conduct of the audit. The requesting party, prior to the commencement of the audit, may be asked to provide an undertaking to the auditor regarding payment or pay a deposit or bond on terms satisfactory to the auditor.

- Audit reports – the auditor is to produce a full report (which may contain confidential information) to the National Allocation Group and the Allocation Agent and a summary of the full report (excluding any confidential information) to the requesting party and the affected parties. The report should (as appropriate):
  - set out the auditor's findings;
  - detail whether the Allocation Agent's performance was fair and equitable and whether the results of the allocation are fair and equitable and, if not, detail how each should be remedied; and
  - set out the auditor's recommendation as to whom must pay the auditor's fees and expenses.

  Parties are given 20 business days to provide the Allocation Agent with comments on any proposed revision or remedy proposed in an auditor's report.

- Payment of cost of audit – the National Allocation Group must consider the auditor's recommendation regarding payment of audit fees and expenses and make a determination according to the auditor's finding and the following principles:
  - if allocation was performed fairly and equitably, requesting party is to pay;
  - if one or more of the relevant parties have not performed their obligations, then those one or more parties are to pay (and, if more than one, in such particulars which reflect the materiality of non-performance).

- Confidentiality – the auditor must keep confidential information confidential and not disclose confidential information other than in the report to the National Allocation Group and Allocation Agent.

- Limitation – an allocation which was performed more than 18 months prior to the requesting party's notice of request for an audit, is not to be the subject of an audit unless there is prima facie evidence of a material breach by the Allocation Agent or manifest unfairness or inequity between parties which shared the Receipt Point.

- Amending Allocations – if the auditor's report shows an allocation should be revised or remedied the Allocation Agent is to undertake the revision or remedy (subject to considering any party's comments on the proposed revision) and notify the affected parties.

10.9 The provisions in the Reconciliation Code demonstrate that industry participants recognised that comprehensive audit arrangements are critical to ensuring allocations are accurate and justify the inclusion of detailed audit arrangements in any new reconciliation regime. The problems encountered in the performance of audits under the Reconciliation Code reinforce the need for governance and compliance arrangements to be improved.

10.10 Gas Industry Co's view is that the following aspects of the arrangements specified in the Reconciliation Code need to be reviewed to ensure the Regulatory Objective is met:

- appointment of auditor;
- scope of audits;
- process for requesting audits;
- audit costs;
- provision of information to auditor;
- confidentiality;
- draft audit reports;
- publication;
- time limits; and
- use of audit reports.

Appointment of auditor

10.11 The National Allocation Group should be removed from the process as it has never met or performed any obligations. Given the other governance roles that are likely to sit with Gas Industry Co, it seems logical for Gas Industry Co to be the party that appoints the independent auditor and agrees the terms of reference (including cost). The basic principles of appointment are likely to align with the provisions in the Reconciliation Code (e.g. auditors must be independent and estimates will be obtained prior to the start of the audit).

Scope of audits

10.12 The scope of possible audits under the Reconciliation Code is too narrow. In addition to being able to audit the Allocation Agent's performance and allocations, there should also be an ability to appoint an auditor to:

- audit a participant's (e.g. a retailer's) performance and systems; and
- audit/ascertain the causes of a particular issue or event. For example, if a report by the Allocation Agent identified an unusually high UFG% for a gas gate for a given month, it may be appropriate to appoint an auditor to audit information provided for that month.

10.13 Some obligations of the Allocation Agent will be specified in the appointment contract (e.g. charges and performance measures) while others (e.g. using reasonable care to

adhere to the allocation process and timeline) will be specified in the reconciliation arrangements. Accordingly, the appointment contract will need to allow Gas Industry Co a right of audit in relation to the Allocation Agent's performance of obligations specified in the appointment contract.

Process for requesting audits

10.14 The processes in the current Reconciliation Code limit audits to where a party requests an audit and under that Code the requesting party may be liable for the auditor's costs if the audit does not discover any errors. While this process addresses the auditor's costs, it does not recognise that other industry participants are likely to face internal compliance costs providing information to the auditor. For example, it is important that frivolous and vexatious audits which place an inappropriate compliance burden on industry participants do not occur. Accordingly, it seems appropriate for an independent body (such as Gas Industry Co) to screen audit requests made by industry participants and ensure that performing an audit appears reasonable.

10.15 Limiting audits to where a participant requests an audit, and providing that requesting parties may be liable for the auditor's costs, is likely to only result in audits where there is a high degree of certainty that errors will be discovered. It is also important for audits to be able to be used to give certainty that participants are complying with their obligations, are supplying accurate information and to identify the causes of any anomalies. Accordingly, there should also be a process for audits to be initiated without a request from an industry participant.

10.16 In terms of that process, Gas Industry Co considers that, as the governing body, it should be able to specify when audits that have not been initially requested by an industry participant should occur. Any such audits may either be on a regular basis or on an ad hoc basis (e.g. following a report by an Allocation Agent). It is likely to be inefficient to try to specify in advance the precise frequency of regular audits. The frequency may appropriately differ between participants (for example, for a participant with a "squeaky clean" audit record it may be appropriate to have a long regular review period but for a participant with a history of audit reports that identify problems it may be appropriate to have a short regular review period). A standard requirement (e.g. all participants are to be audited once each year) is likely to be inefficient given the costs of an audit. Gas Industry Co's preferred approach is for the setting of any regular audit reviews to be left to Gas Industry Co's discretion provided that the time period is in its view efficient.

Audit costs

10.17 The provisions in the Reconciliation Code regarding responsibility for paying the costs of an audit are unlikely to be workable in the new arrangements. The principle of those provisions (that a party at fault will be responsible for paying an appropriate portion of the audit cost) is relevant and should be maintained. But the mechanics need to change to enable Gas Industry Co to be able to instigate audits. Based on the principle, it seems appropriate that:

- where Gas Industry Co requests a regular audit of a particular industry participant, the participant being audited should be required to pay the costs of the audit;

- where Gas Industry Co requests an ad hoc audit of a particular industry participant or an ad hoc audit which covers numerous participants (e.g. an audit to discover the cause of anomalous UFG at a gas gate for a particular month), then the cost of the audit should be determined by the outcome of the audit findings as follows:
    - if the auditor finds material non-performance by one or more participants, then those one or more participants should pay the audit costs (and, if more than one, payment should reflect the materiality of non-performance); and
    - if the auditor does not find any material non-compliance, the costs of the audit should be apportioned appropriately between all relevant participants at the discretion of Gas Industry Co.

10.18 In the event of an audit report finding no evidence of non-compliance it is appropriate for the apportionment of costs to be discretionary rather than become part of the "ongoing costs" (which as discussed in section 9 may be apportioned to retailers on the basis of ICP share). This is because apportioning the cost to all retailers may be unfair. For example, where an audit concerns a particular gas gate it would be inappropriate to require all retailers (whether or not they were active at that gas gate) to pay a proportion of the cost. In some circumstances, it may also be appropriate for non-retailers (e.g. meter owners and distributors) to pay a portion of the audit cost.

Provision of information to auditor

10.19 It is important that auditors are able to require industry participants to provide information for the purpose of an audit. Despite the provisions in the Reconciliation Code, there have been problems with the provision of information to date. Accordingly, participants should be required to provide the auditor with requested information. To ensure compliance, non-provision of information requested by an auditor should be considered a breach of a party's obligations (and subject to the "compliance regime" discussed in paragraphs 10.28 to 10.126).

10.20 It is expected that most of the information requested by an auditor will be technical in nature, however it is difficult to crystal ball gaze. When drafting the audit arrangements the bounds of scope of information provision will need to be considered in more detail. For example, drafters will need to consider:

- whether it is appropriate to include some limitations on the requirement to provide information that is not technical in nature (for example, not require the provision of any information subject to legal privilege);
- how the auditor will get information (e.g. Is a right of entry necessary?); and
- where the auditor requests information which a participant does not have but could obtain with some time and/or expense, is it appropriate to require participants to use reasonable efforts to provide this information rather than mandatory provision?

Confidentiality

10.21 Appropriate provision for confidentiality needs to be made. The provisions in the Reconciliation Code acknowledge that the auditor may obtain confidential information. Gas Industry Co considers it is appropriate for the full audit report to be

made available to Gas Industry Co only (with appropriate internal measures to protect confidentiality) and a version of the report with all confidential information removed to be made available to all other participants. The bar for excluding information on the basis of confidentiality should be set high. This is to ensure that the version with confidential information removed includes as much information as possible for industry participants to understand and usefully comment on the audit report.

Draft audit reports

10.22 The Reconciliation Code gives industry participants 20 business days to provide the Allocation Agent with comments on an auditor's report. This process is inappropriate. It is acknowledged that participants may wish to comment on an audit report, but it is inappropriate for the Allocation Agent to have a discretion regarding the extent to which those comments should result in changes to the auditor's findings. Gas Industry Co's preferred approach is instead for the auditor to first circulate a draft report (where necessary with confidential information removed) and allow an appropriate opportunity (e.g. 2 weeks) for relevant participants to comment on the draft report. This feedback must be taken into account when preparing the final audit report. However, there should be no ability for industry participants to challenge the findings of a final audit report.

Publication

10.23 A key part of the Regulatory Objective is providing consistent, transparent processes. Publication of audit reports would assist transparency greatly and also assist all industry participants to better understand their obligations. Accordingly, Gas Industry Co's view is that final audit reports (with confidential information redacted) should be published on Gas Industry Co's website.

Time limits

10.24 It is necessary to consider the time limit for audits. In the interests of certainty, it is appropriate to set a clear maximum time limit. The Reconciliation Code suggests that auditors should not be able to audit more than 18 months prior to the date the audit was requested except for in exceptional circumstances (e.g. manifest unfairness and inequity). As discussed below[21], Gas Industry Co's view is that:

- "special allocations" (for example, correcting allocation information following the findings of an audit report or the compliance regime) should only be able to occur up to 12 months after the date on which final allocation occurred; and
- the compliance regime should usually only consider a breach that occurred within 3 years of the date of any reporting of the breach or the date of a request for an audit that subsequently detects the breach.

10.25 Based on the 3 year compliance regime timeframe, Gas Industry Co considers it is appropriate for auditors to be able to audit the time period up to 3 years prior to the date on which the audit was requested. However, after the period for special

[21] See paragraphs 10.83 and 10.84 in relation to the 3 year compliance limit and paragraph 10.132 in relation to the time limit for special allocations.

allocations has expired, non-compliance identified by a participant will not be capable of affecting the final allocation, but will be capable of being considered by the compliance regime.

Use of audit reports

10.26 It is necessary to clarify how audit reports may be used. For example, the arrangements will likely need to provide that audit reports may be used:

- by Gas Industry Co (for example, to request the Allocation Agent to perform a special allocation or for the purpose of monitoring the performance of the Allocation Agent);
- by Gas Industry Co or participants as evidence for the need for changes to the reconciliation arrangements;
- for the purposes of the compliance regime (e.g. by an investigator or by a Rulings Panel); and
- for any other purpose considered necessary by Gas Industry Co.

Options / Preferred approach for delivering the Regulatory Objective

10.27 An effective audit regime is necessary to ensure that accurate reconciliation occurs. The audit provisions in the Reconciliation Code are a useful starting point to design an audit regime but some changes are required. Gas Industry Co's preferred approach to meet the Regulatory Objective is:

- Gas Industry Co to appoint independent auditor(s) as required for regular and ad hoc audits.
- auditors should be able to audit performance and systems of any industry participant and the Allocation Agent and audit/ascertain the causes of a particular issue or event;
- Gas Industry Co to determine when regular and ad hoc audits should occur at its discretion. Any industry participant may ask Gas Industry Co to request an audit, but Gas Industry Co will screen requests to ensure audits are reasonable and vexatious or frivolous audits do not occur. Regular audits will not be subject to a pre-determined timeframe but instead the timeframes will be set by Gas Industry Co;
- payment for audits will be based on the principle that a party at fault is responsible for paying an appropriate portion of the audit cost. In particular:
    - the costs of performing a regular audit of a particular industry participant shall be paid by that participant; and
    - the costs of any ad hoc audit will depend on the outcome of the audit findings. If the auditor finds material non-performance, the costs shall be paid by the participant at fault or by the participants at fault on a basis that reflects the relative materiality of non-compliance. If the auditor does not find any material non-compliance, the costs of the audit shall be apportioned between all relevant participants at the discretion of Gas Industry Co;

- participants will be required to provide an auditor with requested information. Precise limits of the requirements to provide information are yet to be clarified but some information may be exempt (e.g. information subject to legal privilege);
- if the auditor considers it appropriate to include confidential information in the audit report, the auditor will prepare a confidential version of the audit report for Gas Industry Co and a redacted version for industry participants;
- all audit reports shall be first circulated in draft and an appropriate opportunity provided for industry comment. Feedback will be taken into account when preparing the final audit report. There will be no ability for industry participants to challenge the findings of a final audit report;
- final audit reports (with confidential information redacted) will be published on Gas Industry Co's website;
- auditors will be able to audit the time period up to 3 years prior to the date on which the audit was requested; and
- audit reports may be used for a variety of purposes. For example, Gas Industry Co may use reports in considering whether to approve a special allocation, for monitoring the performance of the Allocation Agent and for the purposes of the compliance regime.

Q19: *Do you agree with the proposed audit arrangements? If not, please specify which aspects of the proposed arrangements are inappropriate and how you consider they should be improved?*

Compliance regime

What the June Discussion Paper said about this area

10.28 The June Discussion Paper described this area in paragraphs 8.2 to 8.3 of that paper as follows:

"8.2 Although the Reconciliation Code is made mandatory for the relevant shippers and retailers through [Vector's Transmission Services Agreements] and through distribution use of system agreements, there appears to be no effective mechanism that monitors and enforces compliance with the provisions in the Reconciliation Code and allocation agreements. The Gas Industry Co understands that there is substantial industry concern about poor compliance with current allocation and reconciliation arrangements. With no substantial incentive to comply, the arrangements may operate unfairly and inefficiently and this could act as an impediment to developing further competition across the industry.

8.3 The Gas Industry Co also understands that there are substantial industry concerns about the effectiveness of the dispute resolution processes in the Reconciliation Code. Disputes tend to be resolved at present between individual parties with the allocation agent acting as an intermediary in many instances. This requirement of the allocation agent does not form part of a typical allocation agreement."

10.29 In chapter 10 of the June Discussion Paper, Gas Industry Co discussed possible policy instruments (such as pan-industry agreements and rules) for achieving

compliance with allocation and reconciliation arrangements. An assessment of possible policy instruments is discussed in section 12.

What submissions on the June Discussion Paper said

10.30 The submissions on the June Discussion Paper largely agreed that compliance is poor. None of the industry participants submitted that the current arrangements for compliance are effective.

10.31 In particular:

- Contact noted that an industry workshop in 2002 identified a lack of appropriate compliance and that the current processes lack rigour, are inefficient and are not achieving equitable outcomes;
- Genesis noted three main reasons why compliance has been limited (i.e. the code has not evolved since conception, there are limitations enforcing a voluntary code and a lack of transparency surrounding allocation methodology and other participant information);
- Wanganui Gas proposed that Gas Industry Co should initiate an audit to determine the level of compliance and/or non-compliance;
- Nova agreed that effective dispute resolution provisions are required; and
- Tom Tetenburg and Associates Ltd noted that most retailers are complying but compliance by some retailers could be improved.

Further analysis

10.32 It is clear downstream reconciliation arrangements are not sufficiently complied with. An effective compliance regime is necessary to gain industry confidence that downstream reconciliation is accurate. Ensuring compliance is also necessary to realise the other benefits discussed in this paper.

10.33 International material also supports the introduction of a clear compliance process. For example, the HP Invent Report noted as one of the main differences between New Zealand and other jurisdictions the fact that code compliance processes are not formally specified.

10.34 The Regulatory Objective in terms of compliance arrangements requires a regime which provides a high degree of confidence that the reconciliation arrangements will be adhered to. Compliance arrangements need to appropriately incentivise compliance, sanction non-compliance and be mandatory.

Assessment criteria

10.35 To design a compliance regime for reconciliation arrangements it is first necessary to develop a set of criteria against which possible regimes can be assessed.

Gas Industry Co has already considered at some length the design of assessment criteria for compliance regimes in previous papers.[22]

10.36 It is useful and appropriate to use the criteria that were generally accepted as appropriate in relation to the switching compliance proposal. Accordingly, Gas Industry Co's view is that any reconciliation compliance arrangements should be designed against the following assessment criteria:

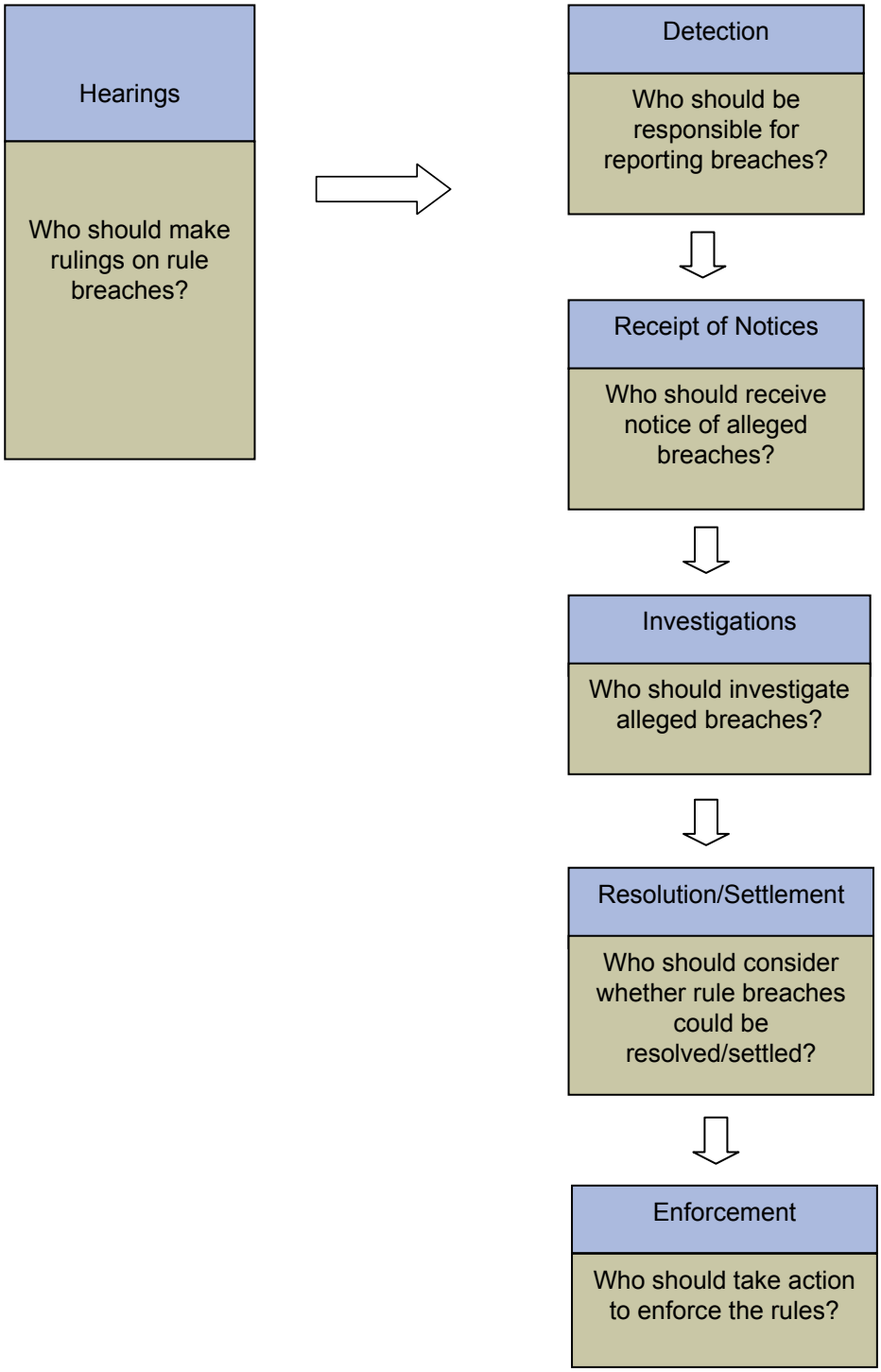
- *reliable and timely processes* – the processes need to allow for timely resolution of potential breaches. This may involve having a dedicated dispute resolution body readily available;
- *credibility* – to ensure credibility the arrangements must be transparent and result in similar outcomes in relation to similar disputes;
- *efficiency* – the processes should be efficient and avoid unnecessary consideration of low level breaches;
- *cost effectiveness* – the processes should not be too costly. Although, there is a trade off here between the costs of compliance and the costs of breaches not being properly rectified; and
- *expertise / decision making by independent third party* – the decision maker should have expertise in the gas industry or access to technical experts where required. The processes should allow for appropriate retention of industry knowledge.

Key features

10.37 The key features of any compliance regime have strong linkages to each other. It is, therefore, necessary to develop any proposed compliance arrangements systematically. The key features were summarised in the switching compliance proposal by the following diagram.

[22] See the following Gas Industry Co papers: "Compliance and Enforcement Arrangements in New Zealand Gas Industry" dated 12 April 2006, "Decision Paper on Modified Arrangements for Compliance and Enforcement Arrangements for Retail Gas Market Registry and Switching" dated 19 July 2006 and "Switching Arrangements for the New Zealand Gas Industry – Part 2 Compliance and Enforcement Arrangements" dated 31 August 2006. Also, Gas Industry Co intends to release in January 2007 a decision paper on the switching proposal which will further discuss compliance. The complete text of the proposed switching compliance regulations is available on Gas Industry Co's website.

Figure 1: Developing the Compliance Regime



10.38 Fleshing out this diagram and other aspects of the switching compliance proposal, it is plain that key considerations are:

- which breaches are covered by the compliance regime?
- who is the decision maker?
- who can detect breaches?
- who should be responsible for reporting breaches?
- who should receive notice of alleged breaches?
- who should investigate alleged breaches?
- who should consider whether rule breaches could be resolved / settled?
- who should take action to enforce (e.g. prosecute) the rules?
- if a rule is found to have been breached, what should be the consequences or penalty?
- what are the appeal rights?
- what are the terms of appointment and liabilities of the persons performing key compliance roles?
- what information about compliance should be published?
- how should the compliance arrangements be funded?

10.39 The consideration of a possible compliance regime in the rest of this section is structured according to these considerations.

Key precedents

10.40 Design of a compliance regime is often a "fit for purpose" exercise. However, there are a number of useful precedents to consider. For the purpose of analysis Gas Industry Co has considered a (proposed) regulatory precedent and a pan-industry precedent as follows:

- the switching compliance proposal. This proposal is particularly relevant as the types of breaches in relation to switching will likely involve similar issues to those which are foreseeable in relation to reconciliation (e.g. failure by participants to comply with rules relating to input information and timing requirements); and
- the compliance arrangements in MARIA which supported reconciliation in the electricity industry.

10.41 The key aspects of these precedent regimes are summarised in Table 6.

Table 6: Comparison of different compliance regimes

Key considerations	Switching Compliance Proposal[23]	MARIA
Which breaches are covered	Breaches by any participant. Participant excludes Registry Operator and Gas Industry Co.	Breaches by any participant. Participant includes service providers.
Decision maker	Rulings Panel. Rulings Panel consists of one member (with alternate) and limited use of industry experts. Use of industry experts approved by Gas Industry Co on a case by case basis. Rulings Panel may reject or approve settlements, determine matter on written submissions, or by hearing. Rulings Panel sets own procedures and must publish decisions.	MARIA Compliance Committee (MCC). Three member MCC is appointed by MARIA Governance Board (MGB) from members of the NZEM Market Surveillance Committee. MCC may reject or approve settlements. MCC sets own procedures and must publish decisions.
Detection	Participants, registry operator and consumers may detect breaches. No monitoring or surveillance function. No audit function.	MGB, participants and service providers may detect breaches. Monitoring and surveillance function provided by Administration Manager. Audits undertaken.
Reporting of breaches	Mandatory reporting of certain breaches by Registry Operator by way of regular reports. Voluntary reporting and self-reporting by participants. Ability for consumers and Gas Industry Co to report a breach.	Any participant or service provider may report a breach to MGB.
Recipient of breach notices	Alleged breaches notified to Market Administrator. Market Administrator notifies other switching participants of alleged	Breaches notified to MARIA Governance Board (MGB) via Administration Manager. Administration Manager notifies other participants of alleged breach,

[23] Note this table summarises the switching compliance proposal in the "Switching Arrangements for the New Zealand Gas Industry – Part 2 Compliance and Enforcement Arrangements" paper dated 31 August 2006. A few aspects of this proposal have been reconsidered and changes may occur (for example, in relation to whether breaches by the Registry Operator should be covered by the compliance regime). For clarification, refer to the decision paper on the switching proposal which Gas Industry Co intends to release in January 2006.

Key considerations	Switching Compliance Proposal[23]	MARIA
	breach, who have right of joinder.	who have right of joinder.
Investigation of breaches and early resolution /settlement	Market Administrator may seek information, must determine materiality of breach (in accordance with criteria), and must facilitate early resolution/settlement of immaterial breaches. Settlement/decision by Market Administrator of immaterial breaches to be published. Parties have right to require any matter (material or immaterial) to be referred to an Investigator. Otherwise Market Administrator to refer to Investigator where breach is "material". Investigator appointed on a case by case basis only. Investigative powers and obligations are set out in the Gas Act. Investigator to investigate breach using set powers and must endeavour to seek early resolution and settlement. Any proposed settlement must be referred to Ruling Panels for approval. Investigator can recommend rejection of settlement. Approved settlement must be published. Unresolved breach allegations to be referred to Rulings Panel for determination.	All breaches investigated by Administration Manager unless deemed frivolous or vexatious. Administration Manager has powers for early resolution or settlement. Early resolutions and settlements referred to MCC for approval.
Enforcement / Prosecution	Investigator provides report on breach to Rulings Panel and speaks to it as required. Parties have right of representation.	Administration Manager (reporting to MGB) acts in the role of "prosecutor". Parties have a right of representation.
Consequences	Rulings Panel has powers under Gas Act to award penalties and other remedies.	The MCC (acting as a rulings body) has a full range of penalties and remedies available to it.
Appeal rights	Appeal rights and judicial review rights against decisions of the Rulings Panel are contained in the Gas Act.	Appeal rights are to an appeal board appointed by MGB.
Appointment and liability of	Gas Industry Co to appoint Market	MGB appointed Administration

Key considerations	Switching Compliance Proposal[23]	MARIA
persons performing key compliance roles	Administrator (or perform role), to appoint Investigators and appoint Rulings Panel, to approve industry experts sought by Rulings Panel, and to manage performance of appointed bodies. Limits on personal liability of members of the Rulings Panel.	Manager and rulings body. MGB members have indemnity from participants.
Publication	Settlements and decisions of immaterial issues resolved/settled by Market Administrator are to be published and settlements and decisions by Rulings Panel are to be published.	MCC must publish decisions.
Funding	Compliance costs paid by Gas Industry Co and recovered from switching participants according to set process.	Funded by participants under a formula.

10.42 Taking into account the precedents above, Gas Industry Co has considered how the key features of the compliance regime for downstream reconciliation arrangements should be structured.

Which breaches are covered by the compliance regime?

10.43 The specifics of a compliance regime should take into account the types of breaches that will foreseeably occur. The key breaches of downstream reconciliation arrangements will likely involve information. For example, breaches may consist of a failure to provide accurate data inputs, failure to provide information in the required data format, failure to meet timing requirements and failure to use the correct information in calculations.

10.44 It is anticipated that retailers, distributors, transmission owners, meter owners, the Allocation Agent, auditors and Gas Industry Co may have obligations (of varying levels) under the reconciliation arrangements. As a starting proposition breaches of any of those obligations should be covered by the compliance regime, unless there is justification for expressly excluding either the party or the breach.

10.45 Accurate downstream reconciliation requires the provision of correct information from retailers, distributors, transmission owners and meter owners. Accordingly, Gas Industry Co proposes that breaches by all of these persons should be covered by the compliance regime.

10.46 In terms of the remaining persons (i.e. Gas Industry Co, auditors and the Allocation Agent) it is necessary to consider whether it is appropriate for the compliance regime to address breaches by any of these persons or whether the governance and appointment process for these persons already provide sufficient security.

10.47 Gas Industry Co will be responsible largely for performing key governance and administrative tasks. Gas Industry Co is accountable to its Board and its shareholders (being industry participants) and it would be inappropriate for it to be covered by the compliance regime.

10.48 Auditors will be appointed by Gas Industry Co on a case by case basis. The terms of reference of the auditor will be subject to agreement by Gas Industry Co and the auditor. Given the case by case appointment, it is appropriate for any failure of the auditor to comply with its obligations to be addressed under that appointment contract and not under the compliance regime.

Q20: *Do you agree that the auditor should be excluded from coverage of the compliance regime (i.e. should compliance be only a contractual matter between Gas Industry Co and the auditor)?*

10.49 The role of the Allocation Agent is crucial to accurate reconciliation. However, the Reconciliation Code suggests that the Allocation Agent's liability is currently quite limited:[24]

"The Allocation Agent is not to be liable for any wrong assessment of, or failure to provide, allocation information, or any other breach of this Agreement except in the case of willful default or gross negligence on the part of the Allocation Agent in the performance of this Agreement. Where the Allocation Agent is liable in such cases, the Allocation Agent is liable for the direct losses or damage cased by the willful default or gross negligence but not for any or all consequential loss or damage, including but without limitation any loss of profits, revenue, business or anticipated savings. Notwithstanding the foregoing, the liability of the Allocation Agent for such direct losses or damage incurred in any one period of 12 consecutive months is to be limited to the amount equal to the gross amount paid or payable to the Allocation Agent over the same period of 12 consecutive months."

10.50 However, some feedback has suggested accountability of the Allocation Agent is a key issue. For example, in its submission on question 5 to the July Discussion Paper Genesis stated:

"… As a general point of principle, given the central role of the Allocation Agent and the potentially significant value implications, Genesis Energy would expect clear and strong enforceable rights against the Allocation Agent, and strong accountability back to industry participants."

10.51 As discussed in section 7, the preferred approach is for Gas Industry Co to appoint the Allocation Agent. Under this appointment structure, it is possible for the Allocation Agent's compliance and liability to participants to be covered off in the appointment contract and/or for the contract to specify that the Allocation Agent is liable to participants under the compliance regime.

10.52 Practice in the electricity sector is that service providers (similar to the Allocation Agent) are covered by the compliance regime but there is a cap on their liability. This cap is high ($500,000 for any event or series of events and not more than $2,000,000

[24] See clause 8.1 of the Model Allocation Agreement attached as Appendix E to the Reconciliation Code.

in any financial year). In addition, the appointment contracts usually oblige service providers to rectify any failure to comply with the rules, with such rectification to be at the service provider's cost. There is a right of termination if the service provider fails to rectify the breach. To prevent double jeopardy, the appointment contract usually provides that the service provider is not liable under the contract if it has already been held liable for a rule breach.

10.53 Gas Industry Co understands that the experience of the electricity sector is that since the inception of the electricity rules in 2003 there has been only one breach claim against the Reconciliation Manager (who has a similar role to Allocation Agent).

10.54 Genesis' submission suggests that it is important to industry that they are able to hold the Allocation Agent accountable for its actions. This suggests that it is necessary for the compliance regime to be able to consider certain breaches of the Allocation Agent's obligations.

10.55 Gas Industry Co's view is that the obligations of the Allocation Agent can be separated into two different types of obligations: process obligations (e.g. performing allocations according to a set time frame and process) and reporting/relationship obligations (e.g. obligations to prepare monthly reports on suspected breaches and causes of anomalous UFG to Gas Industry Co). Gas Industry Co considers industry participants are likely to be more concerned with being able to enforce the process type obligations, rather than the reporting/relationship obligations. In terms of the process obligations, Gas Industry Co is mindful that the Allocation Agent appears to currently only be liable for wilful default or gross negligence.

10.56 While it is appropriate for the Allocation Agent to be liable for certain conduct, it is also appropriate that the potential liability is capped. An Allocation Agent facing potentially unlimited liability would build a premium into their charges to cover the potential risk. The limit of liability in the Reconciliation Code (roughly 12 months of charges) may be too low but at the same time the limits in the electricity industry (up to $2,000,000) seem too high.

10.57 In setting an appropriate limit on liability it is necessary to take into account the potential losses that participants may face as a result of a breach. Much of the loss that will occur (for example, as a result of an incorrect allocation) is likely to be rectifiable (for example, following the release of a special allocation) or will depend on the terms of commercial arrangements entered into by affected participants. Accordingly, the precise extent to which losses may occur is difficult to predict.

10.58 Taking all of this into account, Gas Industry Co's preferred approach is:

- for the 'rules' (either regulatory or pan-industry) to specify key obligations of the Allocation Agent, such as performing allocations according to a set process and timeframe. The 'rules' should require the Allocation Agent to perform all such obligations with reasonable care and skill. The compliance regime should be capable of considering breaches of these obligations;
- for the appointment contract between Gas Industry Co and the Allocation Agent to include reporting and performance criteria. Breaches of these criteria will be a contractual issue, rather than an issue considered by the compliance regime. The ultimate sanction would be termination of the contract;

- both the appointment contract and the compliance regime should include a cap on the Allocation Agent's liability. This cap should be greater than the current cap on liability (which is roughly 12 months of charges) but less than the cap in the electricity industry (which is roughly $2,000,000). Gas Industry Co's current thinking is that a cap of approximately $20,000 for any event or series of events and not more than $250,000 in any financial year may be appropriate, but Gas Industry Co welcomes submissions on this point; and
- the appointment contract should avoid double jeopardy by ensuring that any contractual liability appropriately takes into account liability the Allocation Agent may have already incurred through the compliance regime in relation to the same act/omission.

Q21: *Are the proposed arrangements for Allocation Agent compliance appropriate? What do you think is a suitable liability cap for non performance?*

Who is the decision maker?

10.59 To deliver the key criteria described in paragraph 10.36 (that is a compliance regime that is more likely to result in reliable and timely processes, has credibility, is efficient, cost effective and allows for expertise in decision making by an independent third party) an independent third party decision maker is required. Other options (e.g. bilateral agreement between the participants affected by a breach) would not incentivise compliance with the rules nor provide transparency of compliance.

10.60 The decision maker could be either a specialised body (such as Gas Industry Co, a Rulings Panel as provided under the Gas Act or an industry body) or a non-specialised body (such as the court or an arbitrator).

10.61 A specialised body allows selection of a decision maker with industry expertise, allows an opportunity for industry specialisation and more consistent decision making, is dedicated and readily available, and is often cheaper with less formal processes and fewer delays.

10.62 A non specialised body (e.g. courts or arbitrator) will likely have less technical experience, has a greater likelihood of delays and inconsistent decisions, will likely be more constrained by the matters which they can consider and there may be less opportunity for other participants to join proceedings.

10.63 In terms of the choice of decision maker, all of the key criteria described in paragraph 10.36 appear to be better met by a specialised body. Given the size of the gas industry, the specialised body should not be large. As with the switching compliance proposal, Gas Industry Co considers the body should have only one member, with the ability (where approved by Gas Industry Co) to also use industry experts.

10.64 As indicated by Table 6, a specialised body could be included within either a pan-industry arrangement or a regulatory arrangement. However, the design of a specialised body under a regulatory arrangement would be easier as:

- the Gas Act already provides for a number of key features for example the powers of a Rulings Panel, the rights for judicial review and appeals (to the High Court

and Court of Appeal) and the types of remedies and maximum penalties (of $20,000); and

- the design of the arrangements would be able to piggyback on the switching compliance proposal. It would likely be administratively easier for industry participants if the same decision maker considered switching and reconciliation breaches.

10.65 A pan-industry agreement may also have some greater risks – for example, technical legal risks (such as the high court refusing jurisdiction or refusing to enforce penalties) and risks of waning industry support (for example, Gas Industry Co has been advised the compliance arrangements in MARIA did not operate as effectively as they could have due to insufficient funding by participants).

10.66 The arrangements would also need to specify the process of the decision maker or enable the decision maker to determine its own procedures. In the switching compliance proposal and in the electricity industry the Rulings Panel sets its own process. This acknowledges that the consideration of different breaches and settlement proposals may require different approaches. Gas Industry Co considers that it is also appropriate for the decision maker of any reconciliation arrangements to have flexibility in the setting of its own process (subject to principles of natural justice).

10.67 In summary, an industry appointed decision maker is preferred, and could technically be provided for under either a pan-industry agreement or regulatory arrangement. However, a regulatory arrangement has some advantages. For convenience, the "decision maker" is referred to as the "Rulings Panel" in the rest of this section.

Who can detect breaches and who should be responsible for reporting breaches?

10.68 In designing a compliance regime for downstream reconciliation arrangements, it is necessary to consider who will be able to detect breaches and whether monitoring and surveillance are required.

10.69 It is likely that breaches of reconciliation obligations will usually be detected by either retailers or the Allocation Agent. However, other persons (e.g. meter owners, distributors, transmissions owners, auditors, Gas Industry Co and consumers) may be able to detect some breaches.

10.70 One consideration is whether the compliance regime should include a monitoring and surveillance function. Gas Industry Co considers there is little case for a monitoring or surveillance function to detect breaches in addition to the audit function (discussed in paragraphs 10.4 to 10.27). The power of Gas Industry Co to request an audit provides a form of surveillance on demand where non compliance is suspected. A monitoring and surveillance function will likely impose significant cost that would only be justified for the size of the gas industry if a high level of non compliance was contemplated.

10.71 In the case of participants, the compliance regime could either require mandatory or voluntary reporting of breaches by some or all participants. The decision of which

approach to adopt needs to take into account the likelihood of non compliance and the risk of collusion, both of which are difficult to predict.

10.72 In a voluntary regime there is a risk the participants could collude to not report breaches and resolve breaches themselves or ignore them. For example, Gas Industry Co has been advised that one of the drawbacks with the MARIA compliance regime was that, following a cut in funding by the industry, audits were unable to be carried out which left the Maria Conduct Committee reliant on participants reporting alleged breaches. Gas Industry Co understands there was also a perception among some stakeholders that retailers appeared to have implicit agreement not to allege breaches against each other.

10.73 It is likely participants will not self report significant breaches unless there is a mandatory requirement to report all breaches. Further, in the case of reconciliation, many breaches will be most easily detected by the participant at breach (e.g. the retailer will be most easily able to determine whether 95% of group 5 and 6 meters have been read each gas year quarter).

10.74 However, mandatory reporting by participants can impose a heavy administrative burden on both participants and the compliance regime and can result in reporting of technical or incidental breaches, which may have no to little impact on the efficiencies and overall running of the reconciliation system.

10.75 In the switching compliance proposal, voluntary reporting by participants and mandatory reporting by the Registry Operator was favoured. Voluntary reporting by participants was favoured in response to industry submission and preference. The risk of collusive non-reporting was considered to be offset by imposing a mandatory reporting obligation on the Registry Operator and making self reporting a mitigating factor when determining a suitable remedy.

10.76 In reconciliation, the Allocation Agent will (like the Registry Operator in the switching compliance proposal) be able to detect numerous breaches or the likelihood of such breaches. The audit process can also be used to determine whether non-compliance has occurred. For example, if allocation information is unusual the Allocation Agent may suspect non-compliance but it may not be able to ascertain which participant is in breach and precisely what obligation has been breached. However, an audit of the event may be able to determine the precise non-compliance.

10.77 Similar to the switching compliance proposal, Gas Industry Co considers it appropriate for the Allocation Agent to be required to produce a regular report of any rule breaches it is aware of or suspects. As such, reporting by the Allocation Agent should be mandatory.

10.78 In relation to participants, Gas Industry Co does not consider (on balance) it necessary to introduce a mandatory reporting obligation at this time. However, the compliance regime should include measures that incentivise self reporting as follows:

- audits – participants will be able to ask Gas Industry Co to request an audit. This provides some ability to consider breaches which otherwise only the person in breach would be able to detect;

- self reporting should be a mitigating factor - as with the switching compliance proposal, participants should be able to self report and any self reporting should be a mitigating factor in considering the consequences of a breach; and
- materiality - the compliance regime should be limited to consideration of material breaches. Filtering out immaterial breaches will help incentivise voluntary reporting, as immaterial breaches will be speedily dealt with and not involve the breaching participant in lengthy and time consuming investigations.

10.79 This approach leaves open the possibility of introducing a mandatory reporting obligation in the future (depending on the level of non compliance, the extent to which the Allocation Agent and auditors can in practice detect non compliance, and the level of voluntary self reporting that occurs).

10.80 The switching compliance proposal also allowed non-participants to report a breach. In relation to reconciliation, it may be possible for consumers or non-participants to detect some breaches. However, consumer complaints in relation to reconciliation seem less foreseeable than in relation to switching. Consumers will have some rights to refer complaints to the Electricity and Gas Complaints Commission. However, Gas Industry Co considers that it should not curtail the rights of consumers and other persons to seek compliance with reconciliation arrangements without sufficient compelling reasons. Accordingly, Gas Industry Co's preferred approach is to include ability for non-participants to report a breach even though it is expected this right will be seldom (if ever) used. For example, this right is included in the electricity regulations but has not been used to date.

10.81 Gas Industry Co as governing body should also have a right to report a breach or seek an investigation of non compliance. For example, Gas Industry Co will be receiving audit reports that may expose breaches which it is appropriate for Gas Industry Co to report.

10.82 The switching compliance proposal required any notice of a breach to specify the particular rule which allegedly had been breached. In the case of reconciliation, it may be difficult for participants to know precisely which obligation has been breached. For example, it may be obvious that one or more retailers have provided information for an allocation month that is different from expected and obvious that one or more of those retailers are in breach of their obligations. However, it may not be obvious what obligations have been breached. In such circumstances, the retailer will likely have breached the general obligation to provide accurate information but may also have breached meter reading obligations, or used the wrong meter pressure information, or not properly taken into account a switch of a customer. Accordingly, it seems appropriate for notices of alleged breaches of reconciliation arrangements to only state the rule allegedly breached if known.

10.83 It is also necessary to consider an appropriate time limit for the reporting of breaches. In the switching compliance proposal, a limit of essentially 3 years was proposed (with a maximum limit of 10 years). This time limit mirrors the time limits in the electricity industry. One submitter on that proposal suggested that period is too long. In relation to reconciliation, final allocations will not occur until 1 year from the initial allocation and, as discussed in paragraph 10.132, special allocations will be able to occur for a further 12 months after that. Given these timeframes, Gas Industry Co considers it is appropriate to cover the same time period as in the switching

compliance proposal. Essentially, this means the compliance regime should only consider a breach that was:

- discovered or that ought reasonably to have been discovered within 3 years of the date of any reporting of the breach; or
- detected by an audit that was requested within 3 years of the date of the breach.

10.84 In summary, Gas Industry Co considers:

- breaches of obligations may be capable of detection by a range of persons (e.g. retailers, the Allocation Agent, meter owners, distributors, transmission owners, auditors, Gas Industry Co and consumers) and all of these persons should be able to report a suspected breach;
- the Allocation Agent will be required to report regularly (e.g. each month) on any breach or suspected breach;
- all other participants and other persons (e.g. auditors, Gas Industry Co and consumers) will be able to report voluntarily a breach or suspected breach;
- although not subject to a mandatory reporting obligation, the compliance regime should include measures that incentivise self reporting by participants, including audit arrangements and self reporting being a mitigating factor in considering the consequences of a breach; and
- only breaches or suspected breaches discovered or that ought to have been discovered in the previous 3 year period will be able to be reported.

Q22: *Do you agree that reporting of breaches should be voluntary for participants (not mandatory)?*

Q23: *Do you agree that the Allocation Agent should have a mandatory obligation to report breaches and suspected breaches?*

Q24: *Do you agree that all other persons (e.g. consumers, Gas Industry Co and auditors) should have the right to report a breach?*

Q25: *Do you agree with the proposed time limit for reporting breaches?*

Who should receive notice of alleged breaches?

10.85 It would be inappropriate for breaches to only be reported to the party allegedly in breach. As detailed in paragraph 10.36, one of the key assessment criteria for the compliance regime is credibility, which in turn requires transparency and consistency. To achieve credibility, it is appropriate for all allegations of breach to be forwarded to a central body for investigation.

10.86 In addition to credibility, there is a need for disclosure of breach allegations to incentivise compliance, to allow other participants a right of joinder and to allow participants an opportunity to provide relevant information. An ability to join is

particularly desirable if a significant rule breach issue arises which may have wider implications.

10.87 In the switching compliance proposal, this central role is undertaken by the "market administrator". The market administrator is either Gas Industry Co or a person appointed by Gas Industry Co. In this way Gas Industry Co obtains an overview of the level of non-compliance.

10.88 As with the switching compliance proposal, Gas Industry Co considers it is appropriate that allegations of rule breaches be referred to a "market administrator". And, as with the switching compliance proposal, the market administrator should be Gas Industry Co or appointed by Gas Industry Co. The market administrator should notify other participants of the alleged breach and other participants should have a right to join.

Who should investigate alleged breaches?

10.89 Investigation of breaches will require resources (both of the investigator and of participants) and should only occur when appropriate. Gas Industry Co's view is that investigations should not occur when the alleged breach is immaterial (unless a participant considers it should be investigated or unless the breach shows a pattern of recidivist behaviour) nor where a settlement has been proposed.

10.90 Much thought was put into the design of the compliance regime in the switching compliance proposal. That proposal aims to ensure investigations only occur when it is efficient and encourages a fast-track process where settlements can occur. As discussed below, Gas Industry Co considers the investigation for reconciliation arrangements should use many of the same measures.

10.91 A materiality threshold was included within the switching compliance proposal, and Gas Industry Co considers a similar materiality threshold should be adopted in any reconciliation compliance regime. For example, where a participant accidentally emails the wrong information to the Allocation Agent that participant may technically be in breach, but as there would be the ability for the resulting allocation information to be corrected provided the error is discovered within 24 hours (see paragraph 6.160) the breach is unlikely to be "material". The arrangements should not usually require investigation of such a breach (except if the breach is actually material, for example, if there is a pattern of behaviour showing an underlying compliance problem).

10.92 Building on the switching compliance proposal model, the suggested role of market administrator for reconciliation would be to filter immaterial breaches in an efficient and pragmatic fashion. This avoids unnecessary and expensive investigations and is cost effective and efficient. The market administrator will be able to request information to help it determine materiality, but will have no formal investigative powers. Settlement of immaterial breaches should be encouraged and the market administrator will be responsible for this. All settlements and decisions of the market administrator should be published to achieve transparency.

10.93 In the switching compliance proposal, where the market administrator considers the alleged breach is material or where a participant requests, the market administrator will refer the breach to an investigator for investigation. The Gas Industry Co will

approve a panel of one or more persons who may be selected by the market administrator as investigators. Any appointed investigator must be free of any conflicts of interest. For the same reasons as in the switching compliance proposal, Gas Industry Co considers a similar appointment process for investigators is appropriate in the reconciliation compliance regime.

10.94 The investigator will need clear rights to be able to perform investigations. If a regulatory approach is adopted, investigative powers, rights of entry and obligations to comply with investigations are set out in the Gas Act. Many of these rights of entry and information gathering rights may be necessary for investigating material reconciliation breaches. The investigator should also be able to use information identified in an audit.

10.95 The investigative powers under the Gas Act only apply to a regulatory arrangement, but investigative powers could be agreed under a pan industry agreement. However, enforcing some of those rights (e.g. a right of entry) would likely be more problematic.

10.96 The investigator must undertake an investigation into the facts of the alleged breach. In the switching compliance proposal the investigation focuses on investigating the alleged breach. However, in relation to reconciliation, it is acknowledged above that notices of breach may not specify any or all of the rules breached by a participant. Accordingly, in relation to reconciliation breaches it may be appropriate for the investigator to determine which obligations a participant failed to comply with (rather than be limited to considering whether a participant breached the rule which they are alleged to have breached).

10.97 Settlements will often be advantageous and investigators should endeavour to effect a settlement. If a party admits the breach and proposes a settlement it is efficient to directly refer the settlement proposal to the Rulings Panel for consideration and approval. However, the investigator should be able to recommend to the Rulings Panel to reject a proposed settlement. This is an important safeguard of the integrity of the compliance regime as some settlements may circumvent compliance with the rules and have wider industry importance.

10.98 In the switching compliance proposal, where no settlement is proposed (or a settlement is rejected) the investigator must complete the investigation and prepare a formal report for the Rulings Panel. Gas Industry Co considers this process should also be adopted in the reconciliation compliance regime.

10.99 In summary, Gas Industry Co's view is that investigations of breaches should occur where a participant requests an investigation or where an alleged breach is held by the market administrator to be material. Investigations can be fast-tracked where there is a proposed settlement. Investigators will be approved by Gas Industry Co and an investigator that is free from conflicts selected by the Market Administrator for a particular investigation. Investigators will need to have clear investigative powers. Investigators will need to consider the facts and prepare a report for the Rulings Panel.

10.100 Investigations could technically be provided for under either a pan-industry or regulatory arrangement. However, a regulatory arrangement has some advantages as clear investigative powers are specified in the Gas Act.

Who should consider whether rule breaches could be resolved / settled?

10.101 Credibility (transparency and consistency) has been identified as a key criterion for the development of any compliance regime. It is inefficient for only participants affected by a rule breach to resolve or settle the breach. Any decision or settlement needs to take into account the best interests of the gas industry as a whole.

10.102 Accordingly, Gas Industry Co considers:

- the market administrator should consider whether immaterial rule breaches should be resolved/settled; and
- the Rulings Panel should be able to approve (or reject) proposed settlements of material rule breaches.

Who should take action to enforce (e.g. prosecute) the rules?

10.103 Once an investigator has prepared its report it is necessary to consider who should enforce (e.g. prosecute) the findings with the Rulings Panel. Providing a designated body (e.g. the investigator) with the obligation to report the breach to the Rulings Panel and the right to recommend rejection of a settlement provides an industry overview role and a vehicle for presenting information on breaches to the Rulings Panel.

10.104 If the compliance regime adopted a different approach (e.g. relying on an affected participant to pursue a breach following an investigation) then there may be financial disincentives to pursue a breach unless considerable damage is suffered. This could lead to a 'conspiracy of silence' between participants with minimal incentive to pursue breaches.

10.105 However, it may not be appropriate for the investigator to "prosecute" participants in say a similar fashion to a police prosecutor. Gas Industry Co considers a similar approach to the switching compliance proposal should instead be adopted. In that proposal, the investigator prepares a report for the Rulings Panel. The Rulings Panel can request the investigator speak to the report and affected participants have a right of representation. However, the Rulings Panel is largely free to determine its own procedure for considering the investigator's findings.

If a rule is found to have been breached, what should be the consequences or penalty?

10.106 Section 43X of the Gas Act anticipates a wide range of possible consequences and remedies, including no action, private warnings, public warnings, imposing additional or more stringent record-keeping or reporting requirements; imposing civil pecuniary penalties not exceeding $20,000, ordering payment of compensation, imposing various orders (e.g. an order terminating or suspending the rights of an industry participant) and proposing that Gas Industry Co should recommend to the Minister a change to a rule or regulation.

10.107 Gas Industry Co considers the Rulings Panel should have access to all of these remedies in relation to breaches of reconciliation arrangements. Accordingly, these remedies would need to be provided for in any pan-industry agreement. The ability for the Rulings Panel to make an order terminating or suspending the rights of an

industry participant may need Commerce Act authorisation before it could be agreed in a pan-industry arrangement (the potential need for Commerce Act approval is discussed in more detail in section 12). A provision in a pan-industry agreement enabling imposition of pecuniary penalties may also need careful consideration, as there may be slight risk of a court holding the provision unenforceable.

What are the appeal rights?

10.108 The consequences of a decision may be material. Accordingly, participants will want a right to appeal decisions. Again, the Gas Act includes numerous provisions relating to appeals and judicial review rights (see sections 43ZA to 43ZJ).

10.109 This is an area where from a strict legal perspective a regulatory arrangement may have some advantages over a pan-industry agreement. Under a pan-industry agreement appeals will only be able to be made to a specialist appeals body set up under that agreement (e.g. see the MARIA example in Table 6) and careful drafting will be required. Also, it may be more difficult to seek judicial review of a decision made under a pan-industry agreement.

What are the terms of appointment and liabilities of the persons performing key compliance roles?

10.110 To avoid implications of bias and industry preference, persons in key compliance roles should be appointed by an independent body rather than industry participants.

10.111 In the switching compliance proposal, Gas Industry Co appoints persons to key roles. The proposed arrangements also allow Gas Industry Co to monitor decision making bodies to ensure they are making decisions in a manner which meets industry needs.

10.112 Gas Industry Co considers it is appropriate for the reconciliation compliance arrangement to include similar terms and powers of appointment.

10.113 Limiting personal liability will likely be important to attract a high level calibre of person to compliance roles. Most regimes limit the liability of decision makers. For example, the switching compliance proposal limits liability of the Rulings Panel and the MARIA Governance Board members have an indemnity from participant claims. Similarly, under the electricity regulations personal liability of Rulings Panel members is limited.

10.114 Gas Industry Co considers liability of the market administrator, investigator and Rulings Panel members should be appropriately limited.

What information about compliance should be published?

10.115 Publication of decisions enables overview of how reconciliation arrangements are working and general levels of compliance. Publication is necessary to achieve credibility.

10.116 Gas Industry Co considers all decisions and settlements (by either the market administrator or Rulings Panel) should be published (e.g. on Gas Industry Co's website).

10.117 As discussed above in relation to reporting breaches, allegations of breach should be notified to industry participants (e.g. to allow another participant to join or provide relevant information). However, it may be inappropriate to publicly publish unproven allegations of breach as a member of the public may infer from the publication that a participant is in breach when that has not yet been proven.

How should the compliance arrangements be funded?

10.118 There is a need to consider funding of the compliance regime generally and in relation to a particular breach. Funding can be highly contentious and inappropriate funding requirements can create a disincentive to report and pursue breaches.

10.119 In relation to general funding, Gas Industry Co considers the compliance regime for reconciliation arrangements should be funded by the participants that are going to derive the most benefit from the reconciliation arrangements. As discussed in relation to governance (see paragraph 9.22), Gas Industry Co's preliminary view is that retailers will generate the most benefit from the reconciliation arrangements. A formula for setting fees to cover general compliance costs will need to be included in the arrangements. The formula could allow for penalties or fines awarded by a decision body to be offset against the cost of arrangements.

10.120 The general funding costs may well differ depending on whether a regulatory arrangement or pan-industry agreement is adopted. Under a regulatory arrangement some general compliance costs will likely relate to more than just reconciliation issues. For example, if the switching compliance proposal is implemented then there will likely be many common administrative processes and costs (e.g. Rulings Panel appointment costs).

10.121 Also, there are likely to be economies of scale achieved and increased specialisation and knowledge of the decision maker if the same bodies and similar administrative compliance processes are utilised across the industry, rather than designing separate compliance regimes to address separate issues.

10.122 In relation to costs for a particular breach, costs may be able to be recovered by an award of costs by the decision maker or as part of the terms of settlement.

Options / Preferred approach for delivering the Regulatory Objective

10.123 In summary, Gas Industry Co considers that an appropriate compliance regime for downstream reconciliation arrangements will look similar to the compliance regime in the switching compliance proposal. Gas Industry Co's preferred design for the compliance regime for downstream reconciliation arrangements is detailed in Table 7.

10.124 The "Rulings Panel", "Market Administrator" and "Investigator" could be appointed under either a regulatory arrangement or a pan-industry agreement.

10.125 Table 7 specifically notes areas where the preferred approach differs from the switching compliance proposal or where there are advantages of a regulatory arrangement over a pan-industry agreement.

Table 7: Preferred design of a compliance regime for downstream reconciliation arrangements

Key considerations	Preferred approach
Which breaches are covered	Compliance regime should cover all breaches by any retailer, distributor, transmission owner or meter owner. Certain Allocation Agent breaches should be covered by the compliance regime (e.g. process and timeframe breaches) but other breaches will only be covered by the appointment contract (e.g. preparation of reports and general performance). Subject to final drafting, this position may be different from the position of the Registry Operator in relation to switching. Performance of auditors and Gas Industry Co not covered by compliance regime.
Decision maker	Specialised Rulings Panel should be appointed and consist of one member and limited/appropriate use of industry experts. Use of industry experts to be approved by Gas Industry Co on a case by case basis. Rulings Panel may reject or approve settlements of material breaches or any breach referred to it. Rulings Panel can set own procedures (e.g. determine matter on written submissions or by hearing). There are likely to be some advantages of a regulatory arrangement in terms of the design of the Rulings Panel (e.g. Gas Act already provides key features, ability to piggyback off switching compliance proposal and some less risk, such as technical legal risk and risk of waning industry support).
Detection	Participants and non-participants (e.g. Allocation Agent) may be able to detect breaches. Monitoring or surveillance functions will not be included, but audit function allows a form of surveillance on demand where non-compliance is suspected. A comprehensive audit function was not included in the switching compliance proposal.
Reporting of breaches	Mandatory reporting of breaches by Allocation Agent. Regular reporting to Gas Industry Co by Allocation Agent of suspected breaches. Gas Industry Co has right to report a breach. Voluntary reporting by participants and non-participants. Unlike switching compliance proposal, notices alleging breach will only be required to state the rule that is breached where known, but will still be required to explain the circumstances relating to the alleged breach. Essentially a 3 year time limit for reporting breaches.
Recipient of breach notices	Reported breaches notified to Market Administrator who notifies all participants. Participants have right of joinder.
Investigation of breaches Early Resolution / Settlement	Market Administrator can seek further information and must determine materiality of breach (in accordance with criteria) and facilitate early resolution/settlement of immaterial breaches. No investigation of immaterial breaches unless requested by a participant.

Key considerations	Preferred approach
	Referral from Market Administrator to Investigator of material breaches or breaches that a participant requests to be investigated. Investigator appointed on a case by case basis. Investigator to investigate breach using set powers and must seek early resolution and settlement. Any proposed settlement must be referred to the Rulings Panel for approval. Investigator can recommend Rulings Panel reject settlement proposal. Investigator prepares report on non-resolved/settled breach allegations and forwards to Rulings Panel for determination. Regulatory arrangement has some advantages over pan-industry agreement as clear investigative powers are specified in the Gas Act.
Enforcement / Prosecution	Investigator provides report to Rulings Panel and speaks to report on request. Parties have right of representation. Rulings Panel to determine own process (bearing in mind need to provide for natural justice etc).
Consequences	Rulings Panel should have access to wide range of remedies including issuing a private or public warning, imposing additional or more stringent record-keeping or reporting requirements, imposing civil pecuniary penalties (up to $20,000), ordering payment of compensation, imposing other orders (e.g. an order terminating or suspending the rights of an industry participant) and proposing a change to the downstream reconciliation arrangements be considered by Gas Industry Co. Regulatory arrangement has some advantages as remedies are already specified in the Gas Act, whereas there may be some legal risk including all of these remedies in a contractual arrangement.
Appeal rights	Compliance regime should include set appeal rights. Appeal rights can be included in either regulatory arrangement or pan-industry agreement. Regulatory arrangement may have some advantages as Gas Act includes provisions on appeals whereas contractual appeals to a specialist appeal body will need careful drafting.
Appointment and liability of persons performing key compliance roles	Gas Industry Co to either perform role or appoint Market Administrator, to appoint Investigators and Rulings Panel, to approve industry experts sought by Rulings Panel, to manage performance of appointed bodies, to publish settlements and decisions and to recover costs from industry participants. Liability of persons performing compliance roles should be appropriately limited.
Publication	All decisions and settlements of Market Administrator and Rulings Panel to be published. Notices of breach to be notified to all participants but not published. Publication to be on Gas Industry Co's website.
Funding	General compliance regime costs to be recovered from retailers under set formula. Preliminary view is that the arrangements should be funded by retailers according to ICP number. Formula to specify whether

Key considerations	Preferred approach
	penalties are to be offset against costs of arrangements. Costs in relation to a particular breach may be able to be recovered by an award of costs or as part of the terms of settlement. In terms of funding, there are some advantages with a regulatory approach as common compliance costs can likely be spread over other arrangements (e.g. switching). Likely to be reduced costs overall, economies of scale achieved, and increased specialisation and knowledge if the same bodies and similar administrative compliance processes are utilised across the industry, rather than designing separate compliance regimes for each work stream.

10.126 As noted in Table 7, the preferred approach to the design of a reconciliation compliance regime is similar under either a regulatory arrangement or pan-industry agreement. As discussed further in section 12, the appropriate choice of policy instrument needs to take into account the entire downstream reconciliation regime, rather than just compliance issues.

Q26: *The preferred approach for the design of the compliance regime for reconciliation is similar to the compliance regime proposed for switching. Do you agree that the proposed compliance regime is appropriate? If not, how should the compliance regime be changed?*

Special allocations

10.127 An audit or the findings of the compliance regime may identify that allocations (initial, interim or final) are inaccurate. In some instances it will be appropriate to "correct" allocation information to take into account the results of an audit or decision/settlement from the compliance regime.

10.128 This point was not discussed in the June Discussion Paper. However, some submissions did suggest a need to curtail the Allocation Agent's current discretion to perform corrections (see the discussion on corrections in paragraphs 6.152 to 6.160).

10.129 Gas Industry Co considers it is important to design a process for correcting allocation information following an audit or compliance outcome. This "special allocation" process needs to strike a balance between competing interests and be performed by an independent third party. The competing interests arise from the desire for allocation information to be accurate, and the commercial drivers for retention of allocations that the industry has already relied on.

10.130 In terms of initial and interim allocations, often a "special allocation" will be less necessary as any errors will be able to be picked up in the next allocation (either interim or final). However, in relation to final allocations, the special allocation process is more necessary. That said it would be inappropriate to include an open period for the performance of special allocations. Given the commercial drivers for

certainty of final allocations, there must be a cut off date where industry has confidence that changes will no longer occur.

10.131 The decision on a cut-off date is somewhat arbitrary. The Reconciliation Code suggests that this date may appropriately be 18 months after initial allocation. However, as the proposal is to introduce a rolling interim and final allocation process this 18 month timeframe may no longer be appropriate. Also, the cut off date should take into account that audits and investigations may take some time to complete.

10.132 Taking the above into account, Gas Industry Co's preferred approach is:

- special allocations should be considered by Gas Industry Co who will direct the Allocation Agent to perform a special allocation where appropriate. It is inappropriate for special allocations to be considered by the Allocation Agent due to the necessity of weighing competing interests;
- Gas Industry Co is to weigh unfairness of incorrect allocation data (in light of error discovered by an audit or the compliance regime) with the commercial drivers for retention of that allocation data;
- special allocations can be performed for initial, interim and final allocations. However, in considering whether to direct a special allocation of an initial or interim allocation, Gas Industry Co will need to determine that the allocation data is sufficiently unfair to outweigh the benefit in waiting until the next allocation (i.e. interim or final) is performed;
- each special allocation is likely to require unique consideration, accordingly Gas Industry Co can set its own procedure for determining whether to direct a special allocation; and
- special allocations for any given month's data may only be performed up to the date 12 months from the date of final allocation. After this time, allocations will not change but non-compliance may result in compensation or other consequences as a result of the findings of the compliance regime.

Q27: *Do you agree that there is a need to provide for special allocations? Do you agree with the proposed process for special allocations?*

11 Summary of preferred approach for addressing the problem areas

11.1 Table 8 summarises the preferred approach identified in sections 6 to 10.

Table 8: Summary of the preferred approach to deliver the Regulatory Objective

Broad Issue	Specific Problems	Preferred approach to deliver the Regulatory Objective
Problem Area 1 – Information quality		
Inputs used in allocation process	Lack of standardised file formats and data requirements	• Establish a Gas Data Formats Group to develop, and later review (as and when appropriate), standardised file formats and forward to Gas Industry Co for approval and publication. • Require participants to comply with the standard file formats (if any) published on Gas Industry Co's website.
	Inconsistent estimation methodologies	• Introduce estimation accuracy criteria. The proposed criteria will assess on a rolling basis the accuracy of data provided for initial allocation for allocation groups 3 to 6 on each gas gate aggregated over a rolling 3 month period with the comparable data provided for final allocation. The initial allocation data is required to be within +/- 2% of the final allocation data. • Provide that normalised data be submitted for allocation groups 3 to 6 for each calendar month. Data is to be normalised on a simple pro-rated basis unless a different approach is authorised by Gas Industry Co. • Not introduce a single methodology for forward-estimates at this time, but maintain a watching brief in this area.
	Issues regarding the use of metering devices	• Require 95% of each retailer's allocation group 5 and 6 meters at each gas gate to be read within each gas year quarter and 100% within each gas year. • Require retailers to comply with NZS 5259:2004. Retailers should raise with Standards New Zealand any concerns regarding the inadequacy of that standard.
	Irregular updating of loss factors across distribution networks	• Require loss factors to be updated each gas year on a per gas gate basis. Each updated loss factor should apply to all allocation groups at the gas gate and should apply from the start of the gas year. • Distributors should annually calculate updated loss factors and provide these (and the supporting calculations) to Gas Industry Co by 1 July. There will be no mandated process for this calculation but the aim is a loss factor that is likely to result in an accurate estimation of the expected losses for the period to which the loss factor will apply. • Require publication by Gas Industry Co of updated loss factors and the calculations supporting those loss

Broad Issue	Specific Problems	Preferred approach to deliver the Regulatory Objective
		factors. • Industry participants must notify the distributor and Gas Industry Co within 2 weeks of publication if they consider the proposed loss factor is inappropriate and, in such circumstances, Gas Industry Co will determine the updated loss factor. Gas Industry Co will use reasonable efforts to publish the updated loss factor by 1 September. • If there are continued issues regarding the setting of loss factors, Gas Industry Co will establish a work stream to consider introducing a standardised process.
Quality and reliability of allocation information	Inadequate timeframes	• Retain the current timelines for monthly allocation, but excuse the Allocation Agent from any failure to deliver allocations on time if the Allocation Agent used reasonable care and skill.
	Customer switching and lack of a central registry	• Once switching and registry arrangements have been implemented, consider whether additional changes are required. • Include exemption and transitional provisions to cover any issues faced by industry participants complying with the arrangements prior to the central registry go-live date.
	Lack of effective incentives to provide accurate information and lack of mandatory performance criteria	• Require all industry participants to submit accurate data to the Allocation Agent and comply with all applicable data submission requirements.

"Wash-ups" and corrections	"Wash-up" timeframe inappropriate	• Avoid use of term "wash ups" which may imply a financial settlement.
		• Introduce rolling revisions as follows:
		  • 4 month "interim allocation" (i.e. initial month plus 3 months);
		  • 13 month "final allocation" (i.e. initial month plus 1 year);
		  • these allocations will have no materiality threshold (i.e. all errors will be reallocated no matter how small).
		• Require all participants to submit revised data for both the interim and final allocations.
		• Require that data submitted for the final allocation include actual data or 100% historic estimated / normalised data.

	Ad hoc corrections problematic	• Remove current ad hoc correction process but retain ability for Allocation Agent to correct allocation information (of any allocation - initial, interim or final) within one working day of its publication if a manifest error is discovered.

Broad Issue	Specific Problems	Preferred approach to deliver the Regulatory Objective

Transparency	Lack of transparency / too much confidentiality	• In addition to publication of loss factors noted above, require:
		  • daily publication of daily gas gate metered quantities;
		  • publication of UFG (initial, interim and final) on a per gas gate basis;
		  • publication on a per gas gate basis of total aggregated monthly gas allocated to each retailer (initial, interim and final).

Problem Area 2 – Allocation methodologies and UFG		
Mix of difference and global methodologies	UFG allocation untenable on some gas gates	• Mandate a "1 month UFG global" method of allocation.
Allocation services	Two of the three allocation services are barely used	• Day End Estimated Energy Information Service and Month End Monthly Energy Allocation Service will not be covered by the mandatory reconciliation regime at this stage, but participants will be able to negotiate directly with the Allocation Agent if they wish to acquire these as optional services.
Problem Area 3 – Appointment of Allocation Agent		
Appointment of Allocation Agent	Appointment very problematic	• Gas Industry Co to appoint single downstream Allocation Agent. • Appointment model to be similar to the "service provider" model used in electricity industry. Initial appointment (by tender) to be for a five year term.
Problem Area 4 – Governance		

Governance arrangements	No transparent, workable, enforceable, mandatory governance arrangements	• Establish clear, enforceable, mandatory governance arrangements in either a regulatory arrangement or pan-industry agreement.
		• If a regulatory arrangement is adopted:
		  • Gas Industry Co is the governing body and administrator;
		  • Gas Industry Co is to oversee development of arrangements and make recommendations to the Minister of Energy;
		  • rule changes to occur following Gas Act process (essential components are Gas Industry Co to consult with industry and, where necessary, perform cost / benefit analysis before making a recommendation to the Minister of Energy); and
		  • governance arrangements to be funded by prescribed formula. Gas Industry Co's preliminary view is that this should be by retailers according to number of ICPs. (Funding of audits and compliance discussed separately.)
		• Alternatively, if a pan-industry agreement is adopted, it would also need to provide for clear, transparent governance structures. The structure of the MARIA agreement is presented as a possible precedent.

Broad Issue	Specific Problems	Preferred approach to deliver the Regulatory Objective
Problem Area 5 – Audits and Compliance		

Audits	No workable audit process in current arrangements	• Gas Industry Co to appoint independent auditor(s) as required for regular and ad hoc audits.
		• Auditors should be able to audit performance and systems of any industry participant and the Allocation Agent and audit/ascertain the causes of a particular issue or event.
		• Gas Industry Co to determine when regular and ad hoc audits should occur at its discretion. Any industry participant may ask Gas Industry Co to request an audit, but Gas Industry Co will screen requests to ensure audits are reasonable. Timeframes for regular audits will be determined by Gas Industry Co.
		• Payment for audits will be based on the principle that a party at fault is responsible for paying an appropriate portion of the audit cost. In particular:
		  • the costs of performing a regular audit of a particular industry participant shall be paid by that participant; and
		  • the costs of any ad hoc audit will depend on the outcome of the audit findings. If the auditor finds material non-performance, the costs shall be paid by the participant at fault or by the participants at fault on a basis that reflects the relative materiality of non-compliance. If the auditor does not find any material non-compliance, the costs of the audit shall be apportioned between all relevant participants at the discretion of Gas Industry Co.
		• Participants will be required to provide an auditor with information. Precise limits of the requirement to provide information are yet to be clarified but some information may be exempt (e.g. information subject to legal privilege).
		• If the auditor considers it appropriate to include confidential information in the audit report, the auditor will prepare a confidential version of the audit report for Gas Industry Co and a redacted version for industry participants.
		• All audit reports shall be first circulated in draft and an appropriate opportunity provided for industry comment. Feedback will be taken into account when preparing the final audit report. There will be no ability for industry participants to challenge the findings of a final audit report.
		• Final audit reports (with confidential information redacted) will be published on Gas Industry Co's website.
		• Auditors will be able to audit the time period up to 3 years prior to the date on which the audit was requested.
		• Audit reports may be used for a variety of purposes.

Broad Issue	Specific Problems	Preferred approach to deliver the Regulatory Objective
Compliance regime	The features of the preferred compliance regime for downstream reconciliation arrangements look similar to the compliance regime proposed in the switching compliance proposal. The preferred approach is detailed below. The "Rulings Panel", "Market Administrator" and "Investigator" could be appointed under either a regulatory arrangement or a pan-industry agreement. The description below notes where the preferred approach differs from the switching compliance proposal and where there are possible advantages of a regulatory arrangement over a pan-industry agreement.	
	Which breaches are covered	• Compliance regime should cover all breaches by any retailer, distributor, transmission owner or meter owner. • Certain Allocation Agent breaches should be covered by the compliance regime (e.g. process and timeframe breaches) but other breaches will only be covered by the appointment contract (e.g. preparation of reports and general performance). Subject to final drafting, this position may be different from the position of the Registry Operator in relation to switching. • Performance of auditors and Gas Industry Co not covered by compliance regime.
	Decision maker	• Specialised Rulings Panel should be appointed and consist of one member and limited/appropriate use of industry experts. Use of industry experts to be approved by Gas Industry Co on a case by case basis. • Rulings Panel may reject or approve settlements of material breaches or any breach referred to it. Rulings Panel can set own procedures (e.g. determine matter on written submissions or by hearing). • There are likely to be some advantages of a regulatory arrangement in terms of the design of the Rulings Panel (e.g. Gas Act already provides key features, ability to piggyback off switching compliance proposal and some less risk, such as technical legal risk and risk of waning industry support).
	Detection	• Participants and non-participants (e.g. Allocation Agent) may be able to detect breaches. • Monitoring or surveillance functions will not be included, but audit function allows a form of surveillance on demand where non-compliance is suspected. A comprehensive audit function was not included in the switching compliance proposal.
	Reporting of breaches	• Mandatory reporting of breaches by Allocation Agent. Regular reporting to Gas Industry Co by Allocation Agent of suspected breaches. Gas Industry Co has right to report a breach. Voluntary reporting by participants and non-participants. • Unlike switching compliance proposal, notices alleging breach will only be required to state the rule that is breached where known, but will still be required to explain the circumstances relating to the alleged breach. • Essentially a 3 year time limit for reporting breaches.

Broad Issue	Specific Problems	Preferred approach to deliver the Regulatory Objective
	Recipient of breach notices	• Reported breaches notified to Market Administrator who notifies all participants. Participants have right of joinder.
	Investigation of breaches and early Resolution / Settlement	• Market Administrator can seek further information and must determine materiality of breach (in accordance with criteria) and facilitate early resolution/settlement of immaterial breaches. No investigation of immaterial breaches unless requested by a participant. • Referral from Market Administrator to Investigator of material breaches or breaches that a participant requests to be investigated. Investigator appointed on a case by case basis. • Investigator to investigate breach and must seek early resolution and settlement. Any proposed settlement must be referred to the Rulings Panel for approval. Investigator can recommend Rulings Panel reject settlement proposal. • Investigator prepares report on non-resolved/settled breach allegations and forwards to Rulings Panel for determination. • Regulatory arrangement has some advantages over pan-industry agreement as clear investigative powers are specified in the Gas Act.
	Enforcement / Prosecution	• Investigator provides report to Rulings Panel and speaks to report on request. Parties have right of representation. Rulings Panel to determine own process (bearing in mind need to provide for natural justice etc).
	Consequences	• Rulings Panel should have access to wide range of remedies including issuing a private warning and public warning, imposing additional or more stringent record-keeping or reporting requirements, imposing civil pecuniary penalties (up to $20,000), ordering payment of compensation, imposing other orders (e.g. an order terminating or suspending the rights of an industry participant) and proposing a change to the downstream reconciliation arrangements be considered by Gas Industry Co. • Regulatory arrangement has some advantages as remedies are already specified in the Gas Act, whereas there may be some legal risk including all of these remedies in a contractual arrangement.
	Appeal rights	• Compliance regime should include set appeal rights. • Appeal rights can be included in either regulatory arrangement or pan-industry agreement. • Regulatory arrangement may have some advantages as Gas Act includes provisions on appeals whereas contractual appeal rights to a specialist appeal body will need careful drafting.

Broad Issue	Specific Problems	Preferred approach to deliver the Regulatory Objective

	Appointment and liability of persons performing key compliance roles	• Gas Industry Co to:
		  • either perform role or appoint Market Administrator;
		  • appoint Investigators and Rulings Panel;
		  • approve industry experts sought by Rulings Panel;
		  • manage performance of appointed bodies;
		  • publish settlements and decisions; and
		  • recover costs from industry participants.
		• Liability of persons performing compliance roles should be appropriately limited.

	Publication	• All decisions and settlements of Market Administrator and Rulings Panel to be published. Notices of breach to be notified to all participants but not published. Publication to be on Gas Industry Co's website.
	Funding	• General compliance regime costs to be recovered from retailers under set formula. Preliminary view is that the arrangements should be funded by retailers according to ICP number. Formula to specify whether penalties are to be offset against costs of arrangements. • Costs in relation to a particular breach may be able to be recovered by an award of costs or as part of the terms of settlement. • In terms of funding, there are some advantages with a regulatory approach as common compliance costs can likely be spread over other arrangements (e.g. switching).
Special allocations	Process required for changing allocations following findings of an audit or the compliance regime	• Special allocations to be performed by Allocation Agent in response to a direct request by Gas Industry Co. • Gas Industry Co to weigh unfairness of allocation data (in light of error discovered by audit or compliance regime) against commercial drivers for retention of allocation data. • Special allocations can be performed for initial, interim and final allocations. However, in considering whether to request the Allocation Agent to perform a special allocation of an initial or interim allocation, Gas Industry Co will need to determine that the allocation data is sufficiently unfair to outweigh the benefit in waiting until the next allocation (i.e. interim or final) is performed. • Each special allocation is likely to require unique consideration. Gas Industry Co to set own procedure. • Special allocations for any given month's data may only be performed up to the date 12 months from the date of final allocation. After this time, allocations will not change but non-compliance may result in compensation or other consequences as a result of the findings of the compliance regime.

12 Policy instruments

12.1 The analysis indicates that the policy instrument chosen must be able to:

- implement a number of mandatory information quality measures;
- establish that the month end daily allocation service will be performed using a global methodology on all gas gates;
- allow for the appointment of the Allocation Agent by Gas Industry Co;
- mandate clear, transparent governance structures and related processes (e.g. amendment processes); and
- allow for the provision of audits, establishment of a compliance regime and the ability in prescribed circumstances for Gas Industry Co to perform special allocations.

12.2 Theoretically any policy instrument which achieves mandatory participation and compliance (such as a regulatory arrangement or pan-industry agreement) could meet these requirements. However, Gas Industry Co's analysis has identified that in relation to governance and compliance a regulatory arrangement has some advantages over a pan-industry agreement.

12.3 The choice of policy instrument needs to take into account a variety of factors. This section explores the pros and cons of the two possible options and identifies a number of advantages of a regulatory approach. However, Gas Industry Co intends to perform a cost / benefit analysis before ruling out a pan-industry agreement.

What the June Discussion Paper said about this issue

12.4 The Gas Industry Co discussed possible policy instruments in chapter 10 of the June Discussion Paper. The main points discussed were:

- it is appropriate and efficient for downstream reconciliation frameworks to be mandatory for all relevant participants shipping, retailing or transferring gas on the pipeline system;
- there are essentially three broad options for making industry arrangements legally enforceable and mandatory for all relevant participants:
  - mandatory frameworks enforced through contracts. This option is similar to the current Reconciliation Code framework, which is failing to meet the needs of the industry. The June Discussion Paper noted that this approach has the possible advantages of establishing potentially flexible processes for amending or developing arrangements and less regulatory involvement in industry details. However, the paper also noted that disadvantages include possible Commerce Act risks and pipeline owner leverage enabling pipeline owners to veto arrangements;
  - multilateral agreement between all affected parties (possibly facilitated by an industry body such as Gas Industry Co with participation encouraged by the (implicit) threat of regulation). The June Discussion Paper noted that this approach would require unanimous consent and that industry experience

suggests this would be a protracted exercise with a risk of hold-out from one or more parties;

- promulgation of a regulatory arrangement under the Gas Act. The June Discussion Paper considered the statutory framework and concluded that rules would likely be more appropriate than regulations. Advantages identified with a rules based approach included no Commerce Act risks, levy can cover costs, no risk of pipeline owner veto, and clarity and consistency for all parties regarding what the arrangements are and how they will be enforced and monitored. The June Discussion Paper also noted that a possible disadvantage was that the rule change processes may be more bureaucratic and less flexible than contractual arrangements;

- Gas Industry Co's preliminary conclusion in the June Discussion Paper was that rules appear to be the most appropriate means of achieving compliance with allocation and reconciliation arrangements. As noted in paragraph 12.16, Gas Industry Co's current view is that any such regulatory arrangement would likely consist of rules for technical reconciliation processes and regulations for compliance.

What submissions on the June Discussion Paper said

12.5 Most of the submissions agreed that the main options for mandatory reconciliation arrangements are a modification of the existing contractual arrangements or a regulatory approach. One submission noted whether industry agreement can be reached in respect of Gas Industry Co's governance and compliance role will determine whether a regulatory arrangement is required.

12.6 However, submissions were split on Gas Industry Co's analysis that a regulatory arrangement is preferred. The submissions are summarised in Table 9.

Table 9: Summary of submissions on whether a regulatory arrangement is preferred

Submitter	Preferred Option	Reasons/Other comments
Vector	Rules	There are number of incentives that lead to the conclusion that rules should be recommended.
Contact	Not convinced	Downstream industry track record would suggest rules. But, having Gas Industry Co to oversee improvements and regulatory backstop creates positive environment and more incentives for participants to achieve agreed arrangements. Rules would involve increased bureaucracy, higher costs, less flexibility and stifling of innovation. Industry should have opportunity to employ alternative approach. Commerce Act risks overstated.
Genesis	Undecided but inclined towards rules	Rules appear to be appropriate but cost/benefit analysis required before this can be confirmed. Commerce Act analysis incomplete and too general.
Wanganui Gas	Rules	Analysis doesn't necessarily support rules but Wanganui Gas believes governance issues would be better and more effectively addressed through a rules arrangement.
GasNet	Rules	

Submitter	Preferred Option	Reasons/Other comments
Nova	Industry arrangements	Pipeline owner leverage has not played significant part in the problems. Commerce Act risks are overstated. Progressing to rules too immediately will result in additional costs and retention of inefficiencies due to a slow rule change process.
Tetenburg	Rules	
Powerco	No comment	
MRP	Aim for agreement first	Attempting to find consensus is an important first step in the co-regulatory process, notwithstanding historical behaviour and that the process may take longer. Commerce Act risks exist but analysis is undeveloped and risks should not be overstated. Gas Industry Co should produce a detailed analysis of Commerce Act risks.

Further analysis

12.7 The submissions support Gas Industry Co's analysis that mandatory arrangements are required. As reconciliation is a crucial part of an effective gas market it is not surprising that the arrangements need to bind all relevant participants. There are only two obvious candidates for a mandatory instrument – namely an industry agreement or a regulatory arrangement.[25]

Industry agreement

12.8 A mandatory industry agreed arrangement can take many forms. The June Discussion Paper discusses in paragraph 10.9 that one approach for obtaining a mandatory arrangement is inclusion of a codified framework within a pipeline owner agreement. As such, the industry arrangements become binding through a series of bilateral contracts. This approach is in essence an adaptation of the current Reconciliation Code approach. An alternative approach is for all participants to agree to a common pan-industry agreement.

12.9 Given the number of pan-industry issues that arise in reconciliation, a pan-industry agreement is more appropriate than a series of bilateral contracts. Governance and compliance issues are discussed in sections 9 and 10, and the preferred approach for those issues would need to be included within a pan-industry agreement and could not be structured within a series of bilateral contracts. A pan-industry agreement also mirrors the approach taken by the electricity industry to reconciliation issues prior to the introduction of regulatory arrangements (i.e. in MARIA).

12.10 Accordingly, Gas Industry Co's view is that the only industry agreement that would be capable of meeting the Regulatory Objective would be a pan-industry agreement.

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[25] Other mandatory instruments such as a Code of Practice are inappropriate here. Codes of Practice can be issued under section 37 of the Gas Act for set purposes (e.g. setting industry safety standards). Some of these purposes are relevant to reconciliation (for example, "the operation or use of distribution systems"). However, the reconciliation arrangements are broad and go further in many areas (e.g. compliance) than the matters which it is contemplated a Code of Practice will address.

Gas Industry Co envisages that the pan-industry agreement would be similar in structure to the MARIA arrangement. At this stage Gas Industry Co has not prepared a mock up of what such a pan-industry agreement would look like. However, it would need to cover:

- a similar scope of issues to those addressed in Appendix D;
- governance structures as detailed in section 9; and
- auditing and compliance functions as detailed in section 10.

Regulatory arrangement

12.11 Regulations or rules may be made under the Gas Act for specified purposes. As discussed in section 3 of this paper those purposes are broad enough to include downstream reconciliation arrangements.

12.12 A regulatory arrangement could consist of either regulations, rules or a combination of both. Section 43Q(2) of the Gas Act outlines the circumstances in which rules should be made rather than regulations, as follows:

> *"(2) In deciding whether to make a rule rather than recommend the making of a gas governance regulation, the Minister must have regard to only—*
>
> *(a) the importance of the rule, including whether the rule has a material effect on the rights and interests of individuals:*
>
> *(b) the subject matter of the rule, including whether the rule contains detailed or technical matters rather than matters of general principle:*
>
> *(c) the application of the rule, including—*
>
> *(i) whether the rule applies principally to a particular group (eg, industry participants) rather than the general public:*
>
> *(ii) whether the benefits of publication in accordance with section 43R rather than the Acts and Regulations Publication Act 1989 outweigh the costs of publication by that method:*
>
> *(d) the expertise and rule-making procedures of the recommending body."*

12.13 Paragraph 10.20 of the June Discussion Paper noted that:

"It appears to be likely that the detailed subject matter of allocation and reconciliation arrangements, and the fact that the principal effect of the arrangements is on industry participants rather than gas consumers, would mean that rules would be a more appropriate vehicle for these arrangements than regulations."

12.14 While it may be appropriate for technical reconciliation arrangements to be specified in rules, it will likely be appropriate for compliance arrangements to be covered by regulations. In relation to the switching compliance proposal, it was considered most likely and appropriate that the Minister of Energy would conclude that the compliance

and enforcement arrangements should be implemented by regulations. Gas Industry Co's analysis was explained as follows:[26]

"Gas Industry Co considers that the proposed compliance and enforcement arrangements:

- *are important in that they:*
  - *govern the rights of individuals in respect of the imposition of remedies;*
  - *govern investigative powers and obligations to co-operate with investigations, including a right of entry into industry participants premises, as specified by the Act;*
  - *govern the possible remedies, including compensation, available to a consumer affected by a participant's breach of the rules, as specified by the Act; and*
  - *create a dispute resolution body defined by the Gas Act.*
- *have a subject matter which contains matters of general principle in the determination of rule breaches and disputes rather than technical or detailed matters;*
- *govern how disputes between industry participants will be resolved, and the integrity of the rules maintained; and*
- *have a wider application than industry participants as consumers and other affected persons including Gas Industry Co have a right to report rule breaches."*

12.15 Similarly, in the electricity sector, detailed reconciliation processes and arrangements are recorded in rules and compliance matters in regulations.

12.16 This likely mix of rules for technical reconciliation issues and regulations for compliance is collectively referred to as a "regulatory arrangement" in this paper.

12.17 Gas Industry Co has started considering how a regulatory arrangement would be structured and drafted. Gas Industry Co's thinking to date is attached as Appendix D. This Appendix captures the matters discussed in sections 6 to 10 and parts of the current reconciliation arrangements which do not need to be amended in order to meet the Regulatory Objective (e.g. the categories of allocation groups). This Appendix has been provided to enable submitters to appreciate the expected detail of a regulatory arrangement. The Appendix is a framework only and once progressed will likely be used as a starting point for the formal legal drafting process.

Q28: *Do you have any comments on the detail in Appendix D? Are there any additional matters that should be included in this framework?*

[26] See paragraph 3.12 of the Statement of Proposal paper dated 31 August 2006 titled *"Switching Arrangements for the New Zealand Gas Industry - Part 2 Compliance and Enforcement Arrangements"*.

Assessment of the two options

12.18 Under section 43N of the Gas Act, Gas Industry Co must (amongst other things) seek to identify all reasonably practicable options for achieving the Regulatory Objective before it could make a recommendation to the Minister of Energy for gas governance regulations or rules.

12.19 To assess whether a pan-industry agreement and a regulatory arrangement are both reasonably practicable options it is helpful to consider the steps involved and the pros and cons of the two approaches.

Table 10: Process involved with implementing a regulatory arrangement and a pan-industry agreement

Stage	Regulatory arrangement	Pan-industry agreement	Analysis of pros and cons
Drafting and consultation	Before Gas Industry Co can recommend a regulatory arrangement it would need to follow the process in the Gas Act. This includes Gas Industry Co preparing draft rules/regulations, doing a formal cost/benefit analysis and consultation ("Statement of Proposal").	No set process, but Gas Industry Co practice is to follow same process as for regulatory arrangement. In addition, the process of drafting and consultation would involve numerous parties (and their lawyers) being involved. Industry experience in gas (e.g. OATIS and MPOC) and electricity (e.g. MARIA and MACQ) suggests this could be a time consuming, expensive and problematic exercise.	Drafting likely to be cheaper and quicker for regulatory arrangement, as there will likely be less people and lawyers involved and, in the case of compliance, there is an ability to leverage off the compliance regulations drafted to support the proposed switching arrangements.
Finalising preferred arrangements	Following consultation the recommendation would need to be prepared and made to the Minister.	Participants would need to reach consensus on the preferred arrangements (but not yet execute the arrangements). At a minimum the arrangements would require the consent of all retailers, distributors, meter owners, transmission network owners and Gas Industry Co. Based on industry experience and submissions received, obtaining this agreement could be problematic. The threat of regulatory intervention might help expedite the process.	Process likely to be easier for regulatory arrangement.
Getting approval	Minister will consider recommendation and may either approve the recommendation (or an	Before preferred arrangements can be executed, participants will need to:	Process is likely to be easier and cheaper for regulatory arrangement.

Stage	Regulatory arrangement	Pan-industry agreement	Analysis of pros and cons
	arrangement which doesn't differ from the recommendation in a material way) or reject the recommendation (and send matter back to Gas Industry Co for further consideration).	• consider Commerce Act issues and, if necessary, seek authorisation from the Commerce Commission; and • seek approval from the Minister of the preferred arrangements.	
Authorisation of arrangements	Following Ministerial approval, regulatory arrangement would need to be gazetted.	Following necessary approvals, arrangements need to be executed.	Not determinative but slight process advantages of a regulatory arrangement.
Implementation	Implementation of the arrangements is likely to be similar under both arrangements and take a similar length of time. Implementation includes appointing the Allocation Agent, changing existing industry practices (and where required existing contracts), and establishing governance and compliance structures.		No substantive differences.
Operating costs / amendment process	Rule change process for most reconciliation arrangements and amending regulations for compliance.	Pan-industry agreement will specify how amendments will occur and how costs will be funded.	There may be some benefits of an industry arrangement (e.g. flexibility).
Ongoing achievement of policy aims	Rules and regulations can be amended to ensure policy continues to be appropriately met.	Some risk once arrangements up and running of collective boycott or of participant decisions being motivated by self interest rather than whole of industry considerations.	Regulatory arrangement provides more certainty that ongoing policy aims will continue to be achieved.

12.20 A few issues discussed in Table 10 are worth further exploration. In particular:

- the likely timeframes;
- the likely difficulties reaching consensus and the relevance of previous industry experience;
- Commerce Act considerations;
- the suggestion that pan-industry agreements are more flexible and responsive; and
- the level of certainty that the arrangements will deliver policy aims.

Likely timeframes

12.21 The submissions all seem to support that some improvements to downstream reconciliation practices are required. Many submissions stress that timely improvements are needed and that issues have remained stagnated for too long.

12.22 Gas Industry Co is required to recommend arrangements to the Minister by June 2007. The arrangements being recommended must provide for *timely* improvements

to reconciliation arrangements. Reconciliation is currently inefficient and ongoing delays with improvements are costing the industry. Accordingly, it is important how soon any arrangements can be finalised and put into place.

12.23 Working backwards in terms of timing, Gas Industry Co assumes that it would be easiest for the industry if any new downstream reconciliation arrangements took effect from the start of a gas year (i.e. from 1 October). Migration from the current reconciliation arrangements to new arrangements will be easiest if the arrangements take effect from that date. Numerous contracts will require amendment, many of which may also have a term linked to the gas year.

12.24 Gas Industry Co considers that, following approval of a regulatory arrangement or execution of a pan-industry agreement, at least 6 months will be required to allow for implementation of new reconciliation arrangements. This period will be necessary to tender for, and appoint, an Allocation Agent and for industry participants to prepare for the new arrangements.

12.25 As noted in Table 10, both a regulatory arrangement and a pan-industry agreement would require Ministerial approval. It is anticipated the Minister will take approximately 3 months to approve the arrangements.

12.26 As discussed in more detail below, Gas Industry Co considers it would likely be necessary to seek Commerce Commission authorisation of any pan-industry agreement and on average authorisations take approximately 9 months to process. The Minister is unlikely to approve any pan-industry agreement until the Commerce Commission's decision has been published.

12.27 It is also necessary to consider the time drafting the arrangements will take. The process of drafting pan-industry arrangements is often very time-consuming and problematic. For example, MPOC took approximately 3 years from the announcement of negotiations to commencement and 4 years until Full Open Access.[27] However, preparation of a pan-industry arrangement may take less time if Gas Industry Co was coordinating the process and with the threat of regulatory intervention if consensus is unable to be attained within a reasonable period of time.

12.28 In a best case scenario, Gas Industry Co would expect this process to take at least 9 months (and more likely much longer). Drafting regulatory arrangements is less complicated as unanimous agreement is not required. Gas Industry Co considers that the process it must follow in relation to the drafting and consulting on regulatory arrangements could be achieved within as little as 4 months.

12.29 Crunching the numbers above, it is clear that on a best case scenario a regulatory arrangement could go-live on 1 October 2008 whereas an industry agreement is unlikely to be able to be implemented until at the very earliest 1 October 2009.

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[27] The Minister announced in *"Gas Sector Review – Paper 3, Open Access to Maui Pipeline"* dated 6 November 2002 that pursuing open access through commercial negotiation is recommended. From this announcement to commencement (1 October 2005) was approximately 3 years and to Full Open Access (1 December 2006) approximately 4 years.

Difficulties reaching consensus and previous industry experience

12.30 Previous industry experience suggests that obtaining industry agreement to arrangements will not be straight-forward. Pan-industry arrangements often end up in a "drafting by committee" process, as each party's lawyers want to contribute to matters of drafting. This process is very time consuming.

12.31 The fact that four of the submissions clearly favour a rules based approach (and others are inclined towards it) also suggests that industry agreement would be difficult to obtain. Further evidence of the difficulties obtaining industry consensus is provided by the fact the Reconciliation Code has not been amended since its inception.

12.32 However, pan-industry agreements can be achieved. For example, in electricity, industry arrangements such as MARIA were agreed and operational prior to regulation. The likely backstop of a regulatory arrangement being imposed if industry participants fail to agree should also help encourage industry agreement.

12.33 A large number of parties would need to agree to industry arrangements. For example:

- retailers (i.e. Contact Energy, Genesis Energy, Mighty River Power, Wanganui Gas (including Direct Energy NZ), Bay of Plenty Electricity, Todd Energy (Nova Gas, and Auckland Gas Co) and Multigas NZ (E-gas); and
- distributors (i.e. Vector, Gas Net, Powerco and Todd Energy (Nova Gas)).

12.34 Other persons with obligations / roles under the arrangements will need to agree to the arrangements and be consulted (even if the final legal drafting does not require these persons to be a party to the agreements). Such persons include:

- transmission pipeline owners (i.e. Vector and Maui Development Limited), as they will need to provide daily gas gate quantities;
- meter owners (in relation to meter reading frequency and accuracy);
- Gas Industry Co, as it will have a number of key governance and compliance obligations; and
- the Allocation Agent.

12.35 It is likely that the process of getting industry agreement will be protracted and complicated.

Commerce Act 1986

12.36 Potential Commerce Act implications were noted in the June Discussion Paper[28], although the analysis was queried by some submitters. As identified in the June Discussion Paper the key Commerce Act provisions for the purpose of any reconciliation pan-industry agreement are section 27 (which prohibits arrangements that substantially lessen competition) and section 29 (which prohibits arrangements containing exclusionary provisions).

[28] See paragraphs 10.13 to 10.19 of the June Discussion Paper.

12.37 Fundamentally the proposed reconciliation arrangements are designed to allow for better reconciliation and as such are in essence designed to facilitate competition. However, Commerce Act risk may still arise.

12.38 Although a substantial lessening of competition is required for a breach of section 27, for the Commission to entertain an authorisation application the lessening need not be substantial (see section 61(6A) of the Commerce Act). For example, in the Commerce Commission's determination in relation to the Electricity Governance Board's ("EGB's") Rulebook ("Decision 473"), the Commerce Commission appears to have considered that there was a likely lessening of competition because it was easier for anti-competitive rule changes to be made under the Rulebook than if a Crown EGB was in place.

12.39 If any of the proposed reconciliation arrangements will ultimately impact on price this could also be a concern. For example, in the Commission's MACQ decision the cost of maintaining common quality was held likely to affect price such that section 30 applied (section 30 deems certain provisions of contracts with respect to price to substantially lessen competition).

12.40 The test for substantial lessening of competition focuses on a possible change along the spectrum of market power i.e. an increase in market power or reduction in constraints on market power. However, the Commission's analysis in its authorisation decisions sometimes takes into account wider issues. For example, in Decision 473 the Commission appears to have considered that there was a likely lessening of competition because there was more likely to be an underinvestment in transmission under the EGB's Rulebook than if a Crown EGB was in place.

12.41 Market definition is a critical aspect of any section 27 analysis – the question whether an arrangement would result in a lessening of competition must be asked in the context of each market. Markets can be narrow. For example, the gas market definitions adopted most recently by the Commerce Commission in the Gas Control Inquiry Report (29 November 2004) are the markets for gas transmission services between North Taranaki and Huntly, for gas transmission services for the rest of the North Island, for the provision of gas distribution services in each incumbent gas network and the provision of gas distribution services to commercial and industrial customers in the vicinity of bypass networks.

12.42 Parties to a pan-industry agreement can obtain authorisation from the Commerce Commission under section 58 to enter into an arrangement that breaches section 27 and 29. The consequence is that the arrangement is enforceable and is protected from challenge under the Commerce Act. The Commerce Commission's authorisation process can be divided into two stages:

- does the arrangement have the purpose, effect or likely effect of lessening competition (under section 27) and/or does the arrangement contain an exclusionary provision (section 29)?
- if so, will the benefits of the arrangement outweigh the detriments caused by any lessening of competition?

12.43 Any Commerce Act analysis needs to take into account the detail of the proposals and likely effects on competition. As the precise scope of any reconciliation pan-

industry agreement is still being determined, Gas Industry Co does not consider it appropriate at this time to seek comprehensive legal advice on whether the Commerce Commission would hold that it had jurisdiction and whether it would grant an authorisation.

12.44 However, while detailed drafting is yet to occur it is already possible to identify some matters which could potentially breach sections 27 or 29. For example, the preferred approach would require inclusion of the following potentially exclusionary provisions:

- to make a pan-industry agreement mandatory on the industry it would require all the parties to the agreement (namely at least all retailers and distributors and potentially also other industry participants) to avoid relevant trading with non-parties; and
- the preferred compliance regime would allow the decision maker to issue a range of determinations and penalties, including an ability to make an order terminating or suspending the rights of a party.

12.45 A further issue arises due to the need for unanimity. Each industry participant is likely to assess the Commerce Act risk differently and/or have different risk appetites in this area. Gas Industry Co itself considers that it should take a conservative approach to Commerce Act risk. Experience from some of Gas Industry Co's other work streams suggests some industry participants take an even more conservative approach. The need for unanimity means that if any party requires authorisation to be sought prior to them being able to execute an industry agreement then it will be necessary to seek authorisation. Accordingly, at this stage Gas Industry Co considers it likely that Commerce Act authorisation would need to be sought prior to the execution of any pan-industry arrangement.

12.46 Although Gas Industry Co has not yet considered how likely it is that authorisation would be granted, the assumption that authorisation would need to be sought adds considerable cost and delay into the process. For example, the most recent anti-competitive practices applications considered by the Commerce Commission are summarised in Table 11.

Table 11: Summary of recent Commerce Commission authorisation applications

Applicant	Description	Date of Application	Date of Decision	Approx. time taken for decision
New Zealand Rugby Football Union Incorporated	Salary Cap Regulations, Player Movement Regulations and Modified Division One Regulations	09/11/05	2/6/06	8 months
Todd Petroleum Mining Co Ltd / Todd Taranaki Ltd	Gas Authorisation for MPOC	26/08/05	2/06/2006	10 months
Preussage Energie GMBH/Todd/Shell	Authorisation to enter into arrangements to jointly sell gas produced from the Pohokura Field	23/12/02	01/09/03	9 months
Qantas and Air NZ	Authorisation of a strategic alliance and certain related agreements	09/12/02	23/10/03	10 months
M-Co	Electricity – An arrangement to increase the amount of information available to market participants in the wholesale electricity market by	22/05/02	23/12/02	7 months

Applicant	Description	Date of Application	Date of Decision	Approx. time taken for decision
	releasing bid and offer information two weeks after the bids and offers apply			
Electricity Governance Board Ltd	Electricity – Combining various existing arrangements and integrating new arrangements into a single rulebook	07/12/01	30/09/02	9 months
Average time period for decision				Approx 9 months

12.47 Further, even assuming that the Commerce Commission held it had jurisdiction and authorised the arrangements, there is potentially a further risk that such authorisation would be conditional. For example, in Decision 473 authorisation was only granted for a finite period (of 4 years) and subject to four conditions.

Q29: *Do you agree that obtaining unanimous agreement will likely require seeking authorisation from the Commerce Commission of any pan-industry agreement on downstream reconciliation?*

Flexibility and responsiveness

12.48 Some submissions (particularly in relation to other Gas Industry Co work streams) appear to suggest that pan-industry agreements are preferable to regulatory arrangements as they provide more industry flexibility and are more responsive.

12.49 However, the analysis in sections 9 and 10 indicates that to meet the Regulatory Objective the governance and compliance structures are unlikely to be that different under a regulatory arrangement or pan-industry agreement. This infers that a pan-industry agreement will not necessarily be more responsive than a regulatory approach.

Level of certainty that arrangements will meet policy aims

12.50 Although a pan-industry agreement can be designed to cover the measures discussed in this paper, there is less certainty that such an arrangement would continue to deliver on policy aims. For example, industry participants could theoretically use the rule amendment processes to change to less optimal arrangements, could wind up the agreement or could boycott the arrangement (e.g. by ceasing funding).

Cost / benefit analysis required to confirm reasonably practicable options

12.51 Based on the matters discussed above, Gas Industry Co considers that a regulatory arrangement is likely "more practicable" for delivering the Regulatory Objective than a pan-industry agreement. This is because there are too many uncertainties about whether a pan-industry agreement will be agreed by participants, when it will be able to be implemented, how long the Commerce Commission authorisation process will

take and the outcome of that process (e.g. a conditional authorisation that limits the arrangement to a short term period), whether a pan-industry arrangement will continue to meet policy aims and also some areas (e.g. in relation to compliance) where the analysis has identified advantages with a regulatory arrangement.

12.52 However, Gas Industry Co intends to perform cost / benefit analysis and seek submissions from stakeholders on the feasibility of a pan-industry agreement before deciding that such an agreement is not reasonably practicable.

Q30: *Do you have any views on the feasibility of a pan-industry agreement? Would participants be willing to agree to a pan-industry agreement covering the measures proposed in section 11 of this paper (subject to any necessary approvals, including any necessary Commerce Commission or Ministerial approval)?*

13 Cost / benefit analysis

13.1 The analysis undertaken by Gas Industry Co suggests that there may be two reasonably practicable options for meeting the Regulatory Objective. These are either to establish a regulatory regime or to establish a pan-industry agreement. Both of these options would need to cover the various proposals discussed in this paper and summarised in section 11.

13.2 Before Gas Industry Co could recommend to the Minister a regulatory arrangement it must comply with section 43N of the Gas Act. This would require Gas Industry Co to (amongst other things) assess the benefits and costs of all reasonably practicable options for achieving the Regulatory Objective.

13.3 Gas Industry Co has engaged NZIER to consider how the benefits and costs could be assessed. A paper from NZIER on a possible framework for such a cost / benefit analysis is attached as Appendix E. This paper includes the questions below in relation to information which will be of value for performing the cost / benefit analysis.

CBA Q1: Is the first five years from the earliest date of the proposals taking effect a long enough time period to capture the resulting changes, particularly the benefits? If not, what period do you propose?

CBA Q2: Is this baseline scenario a realistic representation of what would happen in the absence of the proposals? If not, in what ways do you think it could be made more realistic and why?

CBA Q3: Do you agree with assessing the costs and benefits of all of the proposals' options, under each of a regulatory regime and a pan-industry agreement, to simplify and reduce the costs of undertaking the CBA? If not, what alternative approach do you suggest and why?

CBA Q4: Are there any costs identified in Table 1 that you consider it inappropriate to include in the CBA? Are there any significant costs missing from Table 1? Do you have any suggestions as to the likely magnitudes of the costs or how they might, in practice, be estimated?

CBA Q5: Is there any relevant information on electricity market reconciliation that could be used to inform the cost estimates?

CBA Q6: Are there any benefits identified in Table 2 that you consider it inappropriate to include in the CBA? Are there any significant benefits missing from Table 2? Do you have any suggestions as to the likely magnitudes of the benefits or how they might, in practice, be estimated?

CBA Q7: Do you agree that negotiation and agreement would cost less under the regulatory regime and be less likely to involve inefficient compromises? If not, why not?

CBA Q8: Do you agree that wealth transfers should be disregarded in assessing the net public benefit of the proposals? If not, why not, and what alternative approach do you favour and why?

CBA Q9: Do you agree with the use of real discount rates of six percent and twelve percent? If not, why not, and what alternative values do you favour and why?

CBA Q10: Do you agree with the use of sensitivity analysis to test the robustness of the CBA's conclusions? If not, why not, and what alternative approach do you favour and why?

14 Next steps

Presentation workshop

14.1 There are a range of issues covered in this paper in relation to which Gas Industry Co is seeking feedback. Gas Industry Co intends to hold a workshop where it will present the proposals discussed in this paper on Thursday, 25 January 2007.

Submission requirements

14.2 The Gas Industry Co invites submissions on this paper and in particular answers to the specific questions by 5 pm on 23 February 2007. Please note that submissions received after this date may not be able to be considered.

14.3 The Gas Industry Co's preference is to receive submissions in electronic form (Microsoft Word format and pdf) and to receive one hard copy. The electronic version should be emailed with the phrase "Submission on Reconciliation of Downstream Gas Quantities" in the subject header to submissions@gasindustry.co.nz and one hard copy of the submission should be posted to the address below:

Reconciliation Submissions
Gas Industry Co
Level 9, State Insurance Tower
1 Willis Street
PO Box 10-646
Wellington
New Zealand
Tel: +64 4 472 1800
Fax: +64 4 472 1801

14.4 The Gas Industry Co will acknowledge receipt of all submissions electronically. Please contact Gas Industry Co if you do not receive electronic acknowledgement of your submission within two business days.

14.5 Submissions should be provided in the format shown in Appendix A. The Gas Industry Co values openness and transparency and therefore submissions will generally be made available to the public on Gas Industry Co's website. Submitters should discuss any intended provision of confidential information with Gas Industry Co prior to submitting the information.

GART

14.6 Gas Industry Co is aware of some industry views that discussion papers would benefit from the consideration of an appropriate working group.[29] Also, Gas Industry Co anticipates that many submissions will include comments of a technical nature and consideration of these submissions would likely benefit from working group input. Accordingly, Gas Industry Co intends to convene a meeting of the GART mid-March.

[29] See, for example, the comments in Genesis' cover letter to its submission on the June Discussion Paper dated 21 July 2006.

Appendix A: Recommended Format for Submissions

To assist Gas Industry Co in the orderly and efficient consideration of stakeholders' responses, a suggested format for submissions has been prepared. This is drawn from the questions posed throughout the body of this consultation document. Respondents are also free to include other material in their responses.

Submission prepared by: (company name and contact)

Question	Comment
Q1: Do you agree with the definitions adopted by Gas Industry Co in this Discussion Paper? If not, what do you suggest?	
Q2: Do you agree with the proposed Regulatory Objective for downstream reconciliation? If not, what do you think would be a more appropriate regulatory objective?	
Q3: Do you agree with Gas Industry Co's preferred approach towards standardised file formats? If not, how should it be improved?	
Q4: Do you agree with the proposed estimation accuracy criteria and proposal to require normalisation of data? If not, why not?	
Q5: Do you agree with the proposed minimum meter reading requirements? If not, why not?	
Q6: Do you consider the 10TJ threshold for allocation groups 1 and 2 should be reviewed? If so, do you have any information that would assist Gas Industry Co to	

perform this review?	
Q7: Do you agree with the proposed process for the calculation and publication of loss factors appropriate? If not, how should it be improved?	
Q8: Do you consider that the current month end timeframes for the provision and calculation of allocation information are appropriate?	
Q9: Do you consider transitional provisions and/or exemptions will be required prior to the central registry go-live date?	
Q10: Do you agree with the preferred approach of implementing a mandatory requirement on all industry participants to submit accurate data and comply with all data submission requirements?	
Q11: Is Gas Industry Co's proposed regime for rolling 4 month (interim allocation) and 13 month (final allocation) revisions appropriate? Is the terminology ("interim allocation" and "final allocation") appropriate or would alternative terminology (e.g. "first revision" and "second revision") be clearer?	
Q12: Do you agree with Gas Industry Co's proposed restriction of the correction process (i.e. limiting corrections to within one working day of publication and only if a manifest error is discovered)? If not, what alternative correction process do you propose?	
Q13: Do you agree with the preferred approach of publishing gas gate, UFG and specified allocation	

information?	
Q14: Do you agree with the preferred approach of mandating the 1 month UFG global method?	
Q15: Do you agree that the mandatory downstream reconciliation arrangements should not include the day end estimated allocation service and month end monthly allocation service?	
Q16: Do you agree that Gas Industry Co should appoint the Allocation Agent using a service provider model similar to that used in the electricity industry? Do you agree that the initial appointment should be for a 5 year term?	
Q17: Is a pan-industry arrangement as described in this section the most appropriate alternative governance structure to the use of regulations and rules under the Gas Act? Which governance structures would you prefer (regulatory or pan-industry)?	
Q18: Should funding of the reconciliation arrangements be covered by a process detailed in the reconciliation arrangements (rather than, for example, by the levy)? Do you agree with Gas Industry Co's preliminary view that the arrangements should be funded by retailers according to the number of ICPs?	
Q19: Do you agree with the proposed audit arrangements? If not, please specify which aspects of the proposed arrangements are inappropriate and how you consider they should be improved?	

Q20: Do you agree that the auditor should be excluded from coverage of the compliance regime (i.e. should compliance be only a contractual matter between Gas Industry Co and the auditor)?	
Q21: Are the proposed arrangements for Allocation Agent compliance appropriate? What do you think is a suitable liability cap for non performance?	
Q22: Do you agree that reporting of breaches should be voluntary for participants (not mandatory)?	
Q23: Do you agree that the Allocation Agent should have a mandatory obligation to report breaches and suspected breaches?	
Q24: Do you agree that all other persons (e.g. consumers, Gas Industry Co and auditors) should have the right to report a breach?	
Q25: Do you agree with the proposed time limit for reporting breaches?	
Q26: The preferred approach for the design of the compliance regime for reconciliation is similar to the compliance regime proposed for switching. Do you agree that the proposed compliance regime is appropriate? If not, how should the compliance regime be changed?	
Q27: Do you agree that there is a need to provide for special allocations? Do you agree with the proposed process for special allocations?	

Q28: Do you have any comments on the detail in Appendix D? Are there any additional matters that should be included in this framework?	
Q29: Do you agree that obtaining unanimous agreement will likely require seeking authorisation from the Commerce Commission of any pan-industry agreement on downstream reconciliation?	
Q30: Do you have any views on the feasibility of a pan-industry agreement? Would participants be willing to agree to a pan-industry agreement covering the measures proposed in section 11 of this paper (subject to any necessary approvals, including any necessary Commerce Commission or Ministerial approval)?	

Submitter responses to the questions that are included in the NZIER cost/benefit framework paper:

Question	Comment
CBA Q1: Is the first five years from the earliest date of the proposals taking effect a long enough time period to capture the resulting changes, particularly the benefits? If not, what period do you propose?	
CBA Q2: Is this baseline scenario a realistic representation of what would happen in the absence of the proposals? If not, in what ways do you think it could be made more realistic and why?	

CBA Q3: Do you agree with assessing the costs and benefits of all of the proposals' options, under each of a regulatory regime and a pan-industry agreement, to simplify and reduce the costs of undertaking the CBA? If not, what alternative approach do you suggest and why?	
CBA Q4: Are there any costs identified in Table 1 that you consider it inappropriate to include in the CBA? Are there any significant costs missing from Table 1? Do you have any suggestions as to the likely magnitudes of the costs or how they might, in practice, be estimated?	
CBA Q5: Is there any relevant information on electricity market reconciliation that could be used to inform the cost estimates?	
CBA Q6: Are there any benefits identified in Table 2 that you consider it inappropriate to include in the CBA? Are there any significant benefits missing from Table 2? Do you have any suggestions as to the likely magnitudes of the benefits or how they might, in practice, be estimated?	
CBA Q7: Do you agree that negotiation and agreement would cost less under the regulatory regime and be less likely to involve inefficient compromises? If not, why not?	
CBA Q8: Do you agree that wealth transfers should be disregarded in assessing the net public benefit of the proposals? If not, why not, and what alternative approach do you favour and why?	

CBA Q9: Do you agree with the use of real discount rates of six percent and twelve percent? If not, why not, and what alternative values do you favour and why?	
CBA Q10: Do you agree with the use of sensitivity analysis to test the robustness of the CBA's conclusions? If not, why not, and what alternative approach do you favour and why?	

Appendix B: Summary of Submissions on the June Discussion Paper

Q1 Do you agree that it is sensible to divide the issues (with the downstream and upstream allocation arrangements) into short-term and long-term issues and to advance the short-term issues ahead of the long-term ones?	
Vector	*Response to question 1:* No view *Additional comments of relevance in Vector's cover letter:* [Para 3] That said, Vector would express caution in taking decisions regarding allocation and reconciliation without thorough assessment of the interrelationships with other issues being raised and worked on by the GIC and industry. There is a strong need for a coordinated approach to dealing with issues such as transmission access issues, allocation and reconciliation issues, and the establishment of a central registry. Each of these issues are designed to improve current arrangements, but if arrangements across the industry are changing, then it is important to ensure the implications up and downstream are understood and incorporated into other areas of work. [Para 22] Vector generally supports the GIC's perspective on the issues raised in its discussion document. However, Vector has some concerns that a number of parallel initiatives on overlapping issues make it important for the GIC to establish an overarching co-ordination work-stream, to ensure that any changes to industry arrangements are considered across the board prior to implementation.
Contact	This may be sensible but submitters are unable to make that judgement as the discussion paper does not clearly identify which issues would be addressed in the short-term or long term, or a proposed timetable.
Genesis	On the face of it, yes. Genesis Energy sees this as a useful analytical tool to 'ear-mark' some issues for more rapid progression and resolution than others. However, having said that, this analytical approach raises a number of issues. For example: 1. on what basis the Gas Industry Company has determined an issue to be short or long-term? Is it based on criticality/importance or on the length of time to progress the issue? 2. what is short or long-term? For example, has the Gas Industry Company intended to resolve those issues it expects to be of relevance over the next year, or two years, or three years? 3. how does the Gas Industry Company know with confidence that it has appropriately determined the full range of short and long-term issues? The approach outlined in the consultation paper while not explicitly addressing these questions, simply appears to have made a distinction based on ease of fix. To this extent, Genesis Energy understands that the solutions for the issues ear-marked for fixing' will be enduring, irrespective of the nature of outcomes implemented from the remainder of the broader issues that are being worked on simultaneously by the Gas Industry Company in other work streams. While 'biting off what you can, early' is an acceptable strategy to progress issues and will get early runs on the board for the Gas Industry Company, Genesis Energy would like to point out the risk that the Gas Industry Company may end up fixing the fixes. This risk can emerge from two sources. These being: 1. solutions in other workstreams over-riding or displacing the early fix that has been put in place; and/or

	2. the absence of a clear and well articulated long term vision within which the early fixes are being made. In other words, while easy to fix, it may transpire further down the path that either the right solution was not implemented, or the wrong problem was fixed (without a clear strategic direction, any path will take you there). Neither of these risks is insurmountable. However, the Gas Industry Company needs to be mindful of them and carefully manage its work to avoid them eventuating.
WGL	Yes, however care must be taken to ensure that the short term outputs integrate with the long term objectives.
GasNet	Yes
Nova	Yes
Tetenburg	Certainly – do the quick fixes first, to gain some immediate improvement.
Powerco	We agree in principal it is practical to categorise issues as short term and long term issues; and, within these categories, further prioritise them by importance (urgent & important, urgent & less-important, non-urgent & important, non-urgent & non-important). Caution should be exercised to ensure that any short-term issues, which have inter-related long term impacts or contingencies, do not result in the imposition of additional costs to industry nor detract from resolving the longer term issues – it is important to consider the wider-implications of all issues.
MRP	Yes; in the interests of improving the allocation and reconciliation process it is necessary to separate short term and long term issues. The GIC's rationale for the split is sound – allowing the GIC "to proceed with some relatively simple ("short term") changes to industry arrangements, while continuing to develop options for the direction of more fundamental ("long term") changes". [Consultation Paper at 27]. However, although sound in principle, the division between "short term" and "long term" issues is poorly defined at present and skewed in favor of down stream development – the division appears loosely to be between the upstream (wholesale) market ("long term") and the downstream (retail) market ("short term"). Given this, Mighty River Power's is concerned to see that short term development of the downstream market does not preclude the future development of the wholesale market.

Q2	Do you agree that compliance with existing arrangements for downstream allocation is poor?
Vector	*Response to question 2:* No view *Additional comments of relevance in Vector's cover letter:* [Para 8] Vector agrees with the GIC that in this area there is a need for the industry to work together to find solutions. While the Reconciliation Code contains rules and regulations to find solutions. While the Reconciliation Code contains rules and regulations sufficient for ensuring acceptable data quality, it has been clearly identified by the GIC that there are apparently issues of non compliance, or more acutely, little enforcement of the rules in the Code. [Para 9] Vector believes that once an effective means of enforcing compliance with the existing rules is agreed and implemented it would then be appropriate to review the rules for their effectiveness. However, the first step should be to find a means to enforce compliance.
Contact	It is impossible to tell with the existing arrangements whether compliance is poor, however what is clear is that the existing arrangements are not delivering outcomes that ensure good alignment of allocations with deliveries in each month, or equitable allocation of losses. When the gas Reconciliation Code ("Code") was established in July 2000, it was anticipated that after a reasonable period of experience the industry would review the effectiveness of the retail market arrangements contained in the Code and if appropriate amend it. In April 2002 an industry workshop was held to review the Code arrangements and a clear consensus was reached that it was not adequately meeting the industry's requirements. Among issues of concern were: • lack of appropriate governance to oversee the retail market arrangements and compliance; • processes lacked rigour, were inefficient and were not achieving equitable outcomes.
Genesis	Yes. Genesis Energy considers that there are three main reasons as to why compliance has been limited: 1. The Reconciliation Code has not evolved with the industry and, has in fact, remained unchanged since initial publication; 2. In general, compliance with the Reconciliation Code has been reduced due to the limitations of enforcing a voluntary code; and 3. The lack of transparency surrounding allocation methodology and other participant information. In essence, while the Reconciliation Code may, at its inception have been 'fit for purpose' it is no longer and it is wholly appropriate that its on-going efficacy is being assessed.
WGL	We don't actually know. We have no evidence with which to draw any conclusion on whether compliance is good or bad. WGL would suggest that the GIC take ownership of the Reconciliation Code and once this is established initiate an audit to determine the level of compliance and/or non-compliance. Once this is established on facts rather than opinions positive decisions can be made about the short and long term developments of the Reconciliation Code.
GasNet	Gas Net is not aware of any issues of non or poor compliance nor has it had any issues in this regard
Nova	To some extent. Nova Gas believes that the current Reconciliation Code that was developed several years ago has not changed significantly in response to industry concerns. In recent years those concerns have been growing as the retail market is fragmenting and as participants improve their data management

	processes. The lack of change is due to ineffective governance arrangements embedded within the code and specifically there is no change process that facilitates developments and improvements. We also note that much of the change is being driven by industry change and the desire for: - improved processes - greater accuracy - more equitable outcomes It is disappointing to note that an audit of several gates in the Lower North Island requested by an incumbent retailer was impeded by one retailers refusing to provide data as provided for by the Reconciliation Code. Given the contractual obligations for retailers to comply with the Reconciliation code, we believe that the auditor should be able to resort to legal action if necessary to obtain the required data. It may be that the drafting of the code and the contractual chain is not sufficient for this purpose and legal remedy is not currently a practical option.
Tetenburg	Many retailers are complying. However, compliance **by some retailers** to the allocation data requirements could be improved, so that the quality of data submitted for both allocation and reconciliation is improved. (egs: Alloc Grp 4 sites not read monthly, and which are estimated. Accuracy checks to detect errors before data gets committed to the alloc process, timeliness of Rec data provision).
Powerco	Yes. It is our belief that the lack of governance and supervision from the National Allocation Group has meant that the Allocation Agent is required to resolve issues not contemplated by the code as a function of his role. Two keys outcomes users expect when complying with the code are certainty (*outcomes can be reasonably predicted*) and consistency (*similar issues will be treated in the same manner*). These elements are fundamental to ensuring that participants are treated equitably and fairly. We understand that due to a lack of guidance, these elements are sometimes missing with current arrangements.
MRP	Yes.

Q3 Do you agree that governance arrangements (e.g. code modification processes, dispute resolution processes) are not working effectively? Please provide any specific examples that demonstrate your view.	
Vector	Yes, National Allocation Group has never met
Contact	Contact agrees that the code modification processes and audit processes are ineffective. Specific examples include: • Difficulty in effecting a change to the allocation month from second to last business day month to calendar month, even when the Reconciliation Code Working Group ("RCWG") was in place; • Since the RCWG was disestablished in mid 2003 there has been no body to refer Code issues to, or to address the issues identified in the industry workshop held in Aril 2002; • Refusal by a participant to provide complete data to the auditor during a recent allocation audit initiated by Contact Energy. Furthermore the Code does not entitle the auditor to conduct investigative on-site work to identify or dismiss potential data quality issues.
Genesis	Genesis Energy agrees that the current governance arrangements are not working as effectively as they could. For example, Genesis Energy contends that the Allocation Agent does not have sufficient backing to enforce the clauses contained in the Reconciliation Code. An example of this is where a TOU site, whose consumption was approximately 10% of the total gas take at the gate, switched out from Genesis Energy to another retailer. Once the site switched out Genesis Energy's allocated volumes did not represent the 10% drop in load. Although Genesis Energy raised this issue on numerous occasions with the Allocation Agent, he was unable to gain access to the requested information, to investigate why the new retailer was under submitting consumption. After direct dealings with the other retailer the problem was eventually fixed going forward. However, Genesis Energy is still awaiting a wash-up of consumption for the misallocated months. If the Allocation Agent has greater enforcement powers the issue would have be resolved. This example is indicative of the additional transaction costs faced by industry participants as a result of the current operation of the Reconciliation Code.
WGL	Difficult to comment on as to the best of our knowledge no attempts have been made to change the Code since the Reconciliation Code Working Group was disbanded. However if we wanted to propose changes to the Code we do not know how we would do this in the current environment.
GasNet	GasNet is not aware of any issues regarding governance arrangements neither has it sought to make changes.
Nova	Agreed. The current arrangements do not have a process at all for modifying the Reconciliation Code in a practical fashion. While there is nothing preventing industry participants agreeing new arrangements, the process could be hindered by a minority of participants engaging in hold out behaviour. The example of one party withholding data is above demonstrates that it is in the best interests of the industry to put in place appropriate rights for: - auditors receiving data - dispute resolution These provisions should be able to incorporated with a modified reconciliation Code. Distribution arrangements may also be required to change to ensure that parties have a contractual right that they can enforce re provision of data

	to an auditor.
Tetenburg	The Rec Code has not had any amendments. The NAG is not available to consider disputes. Audit requests for information are not taken seriously by some retailers. There is no authority given to anyone to unrestricted access of retailer billing system info. Audits will have to continue until UFG is reasonable and/or incumbent retailers are satisfied with allocation by difference.
Powerco	Yes. We contend that the lack of governance has resulted in a lack of accountability of parties to complying with the code. This was recently demonstrated in the Contact Energy Audit (results recently issued) where the auditors' conclusions criticized participants who failed to provide the auditor with access to information deemed necessary to conduct the audit. The tone of the audit report illustrates the frustration of the auditor who was unable to compel compliance and was hamstrung by delays, lack of co-operation and incomplete information. We note that the code allows for parties to request an audit if required. We comment that normally the appointment of an auditor is made by the board of directors of a company this is to ensure that an auditor is suitably qualified, independent of the company and has no conflicts of interest. Independence (or the perception of) is critical for all users of audit reports, thus we recommend that all future auditors be appointed be the GIC or if not, majority consent of industry participants.
MRP	Yes.

Q4	Do substantial difficulties arise as a result of the need for all shippers at a gate station to agree who to appoint as the allocation agent?
Vector	Only one example known to us where difficulties arose. This was eventually solved.
Contact	Yes. Substantial difficulties arise when a majority (but not 100%) of shippers at a gas gate (or set of gas gates) want to change the allocation agent, or when an allocation agreement expires and one or more shippers (but not all) wish to amend the agreement or term. It is acknowledged that the backstop position is for the distributor to provide the service, or appoint an allocation agent to provide the service, and this to some extent mitigates the issue. However it is not an ideal outcome when it is not the preferred position for the majority of shippers or the shippers most affected by the allocation process.
Genesis	Difficulties have arisen in the past. However, as there is only one party offering Allocation Services at the moment it is not currently an issue but it has the potential to become one again in the future. One of the concerns regarding multiple parties offering Allocation Services it that it becomes more difficult to maintain consistency of allocation methodology with the various agents and assurance that any concerns surrounding confidentiality are mitigated (for example, a previous Allocation Agent was employed by a company who held interests in transmission, distribution and retail).
WGL	No not to our knowledge, however there is currently only one Allocation Agent operating in the industry at the moment. The last change to an Allocation Agent was related to the NGC networks and the difficulties there were in our opinion a resulted from the poor coordination in arranging the switch.
GasNet	GasNet has not experienced any issues with agreement of the allocation agent at its sales gates. Until 2003 GasNet provided allocation and reconciliation services on its network. In 2003 GasNet withdrew from this service and gave notice to the retailers trading on GasNet networks. GasNet was not aware of any issues in the transition and from GasNet's perspective appeared seamless. However this may have been due to there being only one allocation agent and that similar arrangements had been agreed by those retailers at other sales gates.
Nova	Theoretically yes. Although there have not been any issues to date, the current requirements for effectively unanimous agreement provide potentially for hold-out behaviour that may prevent change.
Tetenburg	From an Alloc Agent viewpoint, yes. By being unanimously decided, one party can disrupt the appointment process. A majority decision (either by # of ICPs or by GJ load) would be fairer.
Powerco	Yes. The idea that all parties agree unanimously to the appointment of an Allocation Agent is commendable. However, the disadvantages around uncertainty and responsibility outweigh the benefits of total agreement. Under the current regime it is possible that should a party disagree to the appointment of an Allocation Agent, that allocation and reconciliation could revert back to the Distributor. This could conceivably result in the industry finding itself with multiple Allocation Agents which adds cost and complexity but provides little actual benefit.
MRP	No, not at present. This is because currently there is only one functioning allocation agent. However, in the future a situation could arise where this becomes a problem.

Q5 Do you agree that the Gas Industry Co should implement a regime where the Gas Industry Co becomes the single industry body responsible for appointing an allocation agent (or allocation agents)?	
Vector	Vector believes this should be a fallback position should the industry not reach agreement.
Contact	The preferred option is for a single party to contract with the allocation agent (or allocation agents) and monitor performance in accordance with the arrangements for allocation determined under the umbrella of the GIC. This could be achieved by the Vector in its Transmission Service Agreements setting out how gas title will be determined at receipt points and delivery points, and identifying responsibility for allocation and reconciliation and an appointment process that will avoid the issues that arise currently.
Genesis	Yes. However, while Genesis Energy agrees with this proposition, it is critical that industry participants are closely involved in defining the criteria and process for selection, as well as the eventual appointment. To this extent, Genesis Energy contends that the Gas Industry Company should essentially act as the industry's appointment agent. Any selection and/or appointment process should ensure that: 1. There is a clear prescription for the appointment of an Allocation Agent/Agents; 2. That one of the over-riding criteria of such an appointment is that the Allocation Agent be independent to any gas industry participant; 3. A high level of accountability be placed on the Allocation Agent/s; and 4. Costs be kept to a minimum. We recognise that the specific details of the appointment and accountability regime are yet to be worked through. As a general point of principle, given the central role of the Allocation Agent and the potentially significant value implications, Genesis Energy would expect clear and strong enforceable rights against the Allocation Agent, and strong accountability back to industry participants.
WGL	Neutral on this. We would agree so long as the process was contestable, transparent and produced a cost structure that was better or as a minimum no worse than what we pay now.
GasNet	Gas Net is not concerned with who appoints the allocation agent and unless there is evidence or high risk that the retailer would not agree then questions why the need to change? GasNet is concerned that any change from the existing might result in increase in governance/compliance costs to the industry and consumers as a whole.
Nova	We believe that the level of involvement necessary currently should only be in an oversight role. Should industry arrangements prove impractical or contentious, then there may be a case for a wider role in selection and appointment.
Tetenburg	This could be an alternative to the use of majority decision. However, if the GIC-appointed Alloc Agent also has authority to seek information and to resolve problems, this would be an improvement over the present situation.
Powerco	Yes.
MRP	Yes

Q6 Does the use of the "difference" allocation method and the resulting implications for the allocation of UFG variations create a substantial problem in the industry?	
Vector	*Response to question 6:* No view *Additional comments of relevance in Vector's cover letter:* [Para 11] With regard to a perceived inequitable allocation of UFG variations to incumbent retailers, Vector believes there is more to the issue than that which has been outlined in the document. The current Reconciliation Code appropriately recognises that different allocation groups contribute in different ways to any discrepancies, and therefore need to be treated differently when scaled up or down. [Para 12] For two reasons, care is needed when making any decision to alter any allocation of UFG. [Para 13] Firstly, incentives must remain on those contributing to any variation to improve their processes, data or equipment so that over time, error is reduced in a commercially efficient manner. Recognition should also be made of those who have robust processes, data and equipment that reduce their current contribution to error to ensure this is maintained. [Para 14] Secondly there are a number of reasons for the existing approach to allocation, specifically why only allocation groups 5 and 6 should be scaled and these should be carefully considered, such as: • There is no process to ensure ICP information is robust, • Smaller meters are checked less regularly, • Smaller meters have higher permissible errors, • Smaller meters are not read as often, and estimated data is used for allocation purposes, and • Estimation methods used by retailers are not quality checked. Vector understands some smaller meters have not been read for more than a year. [Para 15] Vector supports a stepwise approach to improving UFG allocation along the following lines: I. Construct a central registry to establish a database of record for the sector, II. Improve compliance by establishing an enforcement regime around the Reconciliation Code, III. Further improve data quality by unifying and standardising estimation processes and procedures, including ensuring ICP information is accurate. [Para 16] Once these steps have been taken, the issue of global allocation versus allocation by difference should be reviewed to ascertain the extent of benefit to be gained from further action. Any further steps taken e.g. wash up frequency, will need to consider the establishment of a central registry and the cost implications involved in revising processes. To pursue too many issues simultaneously could have unintended consequences for other worthwhile projects.
Contact	With difference allocation the key issue is that the incumbent retailer is dependent on the quality (accuracy and completeness) of non-incumbent retailer data, not only for the month but intra month. For gas gates where the incumbent remains dominant in terms of volume, the issues associated with difference allocation are relatively insignificant. However where the incumbent has lost a significant amount of load difference allocation results in the incumbent retailer wearing a disproportionate

	share of the UFG, and the only practical solution is global allocation with UFG allocated based on each retailer's total load (including DM and NDM volumes). If distributors were obligated to annually review and declare loss factors that reflected actual losses trends then "difference" allocation would deliver more equitable allocation of losses. An alternative to distributors determining loss factors would be for the allocation agent to do so, however to enable this to happen with "difference" allocation the incumbent retailer would also have to provide monthly sales data to the allocation agent. Contact Energy currently does this to enable the allocation agent to identify and investigate unaccounted for gas (UFG) anomalies.
Genesis	Yes. The following factors contribute to the problems associated with difference allocation: 1. Lack of standardised file formats and data requirements; 2. Varying estimation routines between retailers; 3. Irregular updating, if any, of loss factors across distribution networks; 4. Lack of compliance by participants; and 5. Lack of visibility of processes and data.
WGL	We do not believe so as far as our incumbency is concerned. It is unclear to WGL if problems with allocation and UFG are the result of the methodology applied or in the accuracy of the data provide by retailers. Again we would recommend an audit to establish the cause or fault of any problems.
GasNet	GasNet is unaware of any problems with the application of the "difference" allocation method.
Nova	It creates risk for incumbent retailers that they may not be willing to bear, especially when their proportion of the volume traded at a gate drops below a significant percentage. Equally, there are some cost benefits of being an incumbent in that there is a lower degree of compliance regarding meter reading – particularly with non TOU meters. **We believe there is currently a process for incumbent retailers at a gate to switch to the global reconciliation methodology. There is no external reason why current incumbent retailers should not be able to change to global reconciliation as provided for.**
Tetenburg	Yes. This probably wouldn't be so if the network cos had regularly reviewed UFG, disclosed UFG%s annually, and investigated UFG anomalies (as per Rec Code). Now we have moved to the situation where the UFG%s are unreasonable, and untenable for the Incumbent Retailer.
Powerco	The use of the "difference" method impacts on incumbent retailers when non-incumbent retailers data accuracy is poor. This may be a positive impact, where the incumbent is charged for less gas than purchased, or negative impact. Global reconciliation may be unfair on retailers whose customer base is solely "major customers" all of whom have time of use metering. Given that TOU metering is more accurate then mass-market metering, the impact of UFG on TOU sites may be smaller then retailers who have a large mass market customer base. However, this could be mitigated through applying only technical loss factors to TOU sites (i.e allocation group 2).
MRP	Not in our view. Mighty River Power prefers a difference approach, on the basis that it is then in the interests of the incumbent retailer to resolve issues that arise. It also results in a much simpler allocation process.

	Nonetheless, Mighty River Power also believes that all parties should submit volumes for all gas gates (Global submission) to enable Identification of UFE. Further, the volumes traded should be made visible to all to encourage accuracy improvements by promoting visibility.

Q7 If there are problems with the allocation of UFG variations, is working towards mandatory global allocation an appropriate response for the Gas Industry Co?	
Vector	No. Simply re-distributing any discrepancies is not solving any problems, it is only re-distributing them. In doing so it would detract effort from resolving any shortcomings by looking for the underlying causes, such as poor compliance, poor data integrity, poor estimating etc. This is where the efforts should be concentrated in order to get to the root of the problem.
Contact	Global allocation is the most sensible mechanism to deliver equitable allocation of losses, provided the allocation of UFG is based on total retailer volumes submitted, i.e. including DM and NDM volumes and not just groups 5&6. Irrespective of whether or not global allocation is adopted, Contact still considers it is important to require an annual review and reset of loss factors to reflect actual losses trends as relevant loss factors are also required by retailers for other purposes.
Genesis	Yes. Genesis Energy looks forward to being able to comment on the details of the Gas Industry Company's suggested "global" methodology. In particular, the specifics of any 'global' method will need to ensure that there is sufficient disincentive for participants to under-submit. In terms of one specific comment, Genesis Energy notes that section 8.12 of the discussion paper seems to suggest that moving to 'global' may be affected by retailers requiring time to adjust their systems. Given that Genesis Energy has the largest incumbency, it can unequivocally state that such a comment does not relate to its systems and would encourage the Gas Industry Company to move this issue forward as fast as possible.
WGL	Possibly, however which global methodology would you apply, that as described within the Reconciliation Code or the variation being used on certain gates. Again the accuracy of the data provided may be more important that methodology applied. With a global methodology all retailers will be involved in estimating monthly returns and each retailer will probably use a different estimating methodology. WGL would suggest that the GIC may need to consider the application of a single estimating methodology for the industry in order to bring some consistency to this issue.
GasNet	GasNet considers without question that there is greater uncertainty over the determination of UFG on its networks with the current arrangements and processes and supports the move to Global.
Nova	We believe that reconciliation using the differencing method should be an option for retailers. In some instances due to the nature of trading volumes at a gate it may be more efficient in terms of costs. Some gates may have a few large TOU customers, a small number of non TOU customers and trading volumes dominated by a retailer that may make using the differencing method less costly. The only issue that non incumbent retailers have with trading at a gate where a competitor retailers is the incumbent is with potentially overstated fixed UFG percentages calculated by the distribution company. Unless the incumbent retailer submits there volumes for reconciliation it is very difficult to calculate what UFG technically should be.
Tetenburg	Yes, if by Global you mean the 1 Month UFG Method. That is, scale all Alloc Grps, not just Grps 5 & 6. Also, global will mean that all retailers have to provide data to the same degree of accuracy.
Powerco	Yes, notwithstanding the issues faced by retailers whose business proposition is major customers see Q6.

MRP	See response to question 6.

Q8	If global allocation is not made mandatory, how important would it be for 12 month rolling loss factors to be used in the allocation process?
Vector	This is important as an integral part of an overall package to improve allocation data quality.
Contact	If difference allocation is retained it is essential that loss factors are reviewed and reset annually to reflect actual losses trends. It is also recommended that an annual review and reset should also occur even if global allocation is adopted as loss factors are used for other than allocation of losses in the allocation process. Contact considers an appropriate process would be for the loss factors to be calculated as at the end of July each year and be reset with an effective date of 1 October, reflecting the actual losses for the previous 12 months to 31 March (or possibly 31 December). Contact has written to Vector and Powerco and requested they reset loss factors from 1 October 2006 for Contact's incumbencies. Contact has provided the last 3 years of losses, UFG and loss ratio trend data in support of the request.
Genesis	Genesis Energy considers that the use of 12 month rolling loss factors is important irrespective of whether global allocation is mandatory or not. The Gas Industry Company should ensure that distribution companies are required to review loss factors across their networks every 12 months and, that these losses are factored into allocated volumes. Genesis Energy suggests that the revised loss factors be made available and effective as of 1 October of each new gas reconciliation year as Genesis Energy, as with other retailers, uses the loss factors when reviewing customer pricing schedules.
WGL	WGL believes that this would be an interesting development. Changes to published UFG rates are few and far between and it would be very interesting to see how the rolling 12 month UFG figures compare to the published figures.
GasNet	GasNet considers that any ongoing trend analysis would be of value to prevent any sudden change in UFG and to monitor in particular the inputs used for the determination of UFG.
Nova	As noted above, one of the main issues with the differencing method currently is the calculation of loss factors or UFG that is allocated to independent retailers on a fixed basis. If the loss factor is too high then the incumbent retailers received a windfall benefit at the expense of non incumbents. If it is too low, then the opposite is true. This also suggests that the calculation of loss factors can affect the ability of retailers to compete depending on whether they are disadvantaged by loss factors or not. In order to overcome this deficiency in the differencing method, distribution companies should have some obligation to: a) calculate what UFG should actually be b) ensure that UFG reflects such events as gas escapes, leaks and other technical reasons for UFG c) ensure that all connections to the network are recorded and allocated to a retailer who is responsible for reconciling consumption at that site d) ensure that metering standards are adhered to by participants.

Tetenburg	If you don't go Global, then there should be an immediate review of the UFG%, and these should be updated for allocation asap. Keep the figures as up to date as possible. If any UFG%s are unrealistic, all the retailers are incentivised to get involved in determining the cause(s).
Powerco	The devil is in the detail in the calculation of loss factors. We suggest a longer term approach to loss factors be considered rather then a rolling twelve month period to avoid "garbage in / garbage out".
MRP	Mighty River Power considers it would be important. However, irrespective of this, accurate calculation and review of UFE is both necessary and desirable.

Q9	Should all gas gates daily metered quantities be published daily? What difficulties (e.g. confidentiality) might arise from daily publication?
Vector	For some gates confidentiality issues would need to be considered.
Contact	Gas gate metered quantities should be published daily. That is necessary to manage pipeline balancing and shipper balancing risks. As far as we are aware only NGC Energy (Vector's gas retail business) has indicated any concern that publication of metered quantities would result in the release of confidential information. Industry participants will have a reasonable understanding of gas quantities delivered at gate stations. Confidentiality concerns are insignificant and far outweighed by the benefits that would result from release of the information. Consideration should also be given to which gate station data should be available near real time as opposed to the day after. Such a decision would need to take into account materiality.
Genesis	Yes. Full disclosure of measured gate volumes should help move the industry forward as it would help to: 1. Expedite investigations into anomalous volumes; 2. Help to provide confidence in allocated volumes; 3. Provide greater transparency to the industry of trends; and 4. Help retails to use accurate gate data to formulate shapes for 'forward/future' estimations etc.
WGL	Ideally yes, however we accept that where a retailer is the only supplier to a gate there may be confidentiality issues surrounding this information.
GasNet	From its own perspective GasNet does not have any concern with this. However these circumstances GasNet would usually seek the acceptance of the retailers trading on its networks when faced with such a request and would therefore tag our support as being conditional upon the responses of the retailers in this regard. With regards to confidentially, the only obvious concern would be where there is one retailer trading on one sales gate, particularly where there is one or few end users supplied from the gate making it more apparent what the end use quantities are.
Nova	Yes. Issues of confidentiality we believe are overstated. However, we believe that the industry has agreed a solution that the issue of confidentiality by aggregating those gates that may be dedicated to one or two retailers. Daily gate data is expected to be published via the Vector version of OATIS later this year. Availability of daily data is critical for parties who may prefer the option of attempting to more accurately forecast consumer demand, particularly for non TOU customers where. Several years of data should be made available if the data is to useful through the application of statistical techniques.
Tetenburg	This would alleviate the need for a Daily Info Service from the Alloc Agent. The downside is the loss of confidentiality about what other retailers are trading at the gates.
Powerco	Confidentiality is potentially the biggest hurdle, although it is our understanding that the Allocation Agent provides total monthly reconciled metered quantities to some parties on request.
MRP	Yes. We don't expect any difficulties.

Q10 To what extent do industry problems arise as a result of poor quality data supplied into the allocation process?	
Vector	Poor data quality and timeliness are the major cause of industry problems. If data quality problems could be solved, most of the other issues would become much less relevant. The main effort of any proposed changes therefore has to go into improving data quality and compliance.
Contact	There are two issues here: 1. the impact on "upstream" allocations and settlement processes of downstream allocations and revisions to downstream allocations; 2. the downstream allocation arrangements fail to deliver quality allocation data and equitable allocation of UFG. <u>Issue 1</u> The current linkage will have to continue while Maui legacy contracts remain which require determination of the actual quantity of Maui legacy gas delivered at Maui delivery points. That determination can only be made when allocations at Vector gate stations have been calculated. Once the Maui legacy arrangements terminate it would be possible to establish arrangements at Vector gate stations so that imbalances and overruns on Vector pipelines are determined at each gate station. That would require ex-ante nominations to be made at each gate station. Vector's current arrangements mean that mismatches (balancing charges) are not identified at gate stations. Mismatches relate to a pipeline rather than to specific gate stations. <u>Issue 2</u> A measure of a quality allocation process is that • each retailer's allocations reflect actual deliveries to its customers plus an equitable allocation of UFG. • residual UFG is close to zero on a rolling 12 months basis (i.e. after removal of the effect of estimating daily quantities for non daily metered sites); • monthly absolute UFG is close to zero. Contact's monitoring of its energy balance (residual UFG) where it is the incumbent retailer indicates that the current arrangements fail to deliver on the second and third points, while lack of transparency and on site investigative audits of participant systems and data production processes means that it is impossible to confirm the first point. The bottom line is that the playing field is not level and Contact in its incumbencies is wearing an unacceptable level of UFG related costs – including transmission overruns, gas purchase costs, and variable network charges due to the affect of scaling by Vector and Powerco).
Genesis	In Genesis Energy's view, the outcome of the allocation process is only as good as the quality of the data that is submitted into it and the effectiveness of the process itself. As there are no formal standards on either data quality or file formats the question is whether it is a problem with initial data being supplied or the conversion of data once it is with the Allocation Agent. There is unquestionably an argument to look at estimation routines (comparing percentage change between initial file and subsequent wash up files) and introducing standard file formats (GIEPS = Gas Information Exchange Protocols) to help mitigate some of the issues surrounding data quality. The flow on effects of poor quality data can be seen immediately through transmission costs which rely on the downstream data for invoicing.
WGL	Poor quality data will impact on the whole allocation process and therefore through the whole supply chain from wholesale to transmission to networks.

GasNet	There have been very few retrospective corrections applied to data provided by the allocation agent. Other than these known errors, GasNet is not aware of any issues around the quality of data. This may be because the data is of good quality or because the systems to track and identify issues are absent.
Nova	As a non incumbent we are not aware of the extent of the problem apart from what incumbent retailers tell us. Two significant incumbent retailers have disclosed that: a) they are allocated significantly more volume than they believe their customers consume; b) the non TOU consumption they calculate to compare against their incumbent allocation each month can be over or under estimated by as much as 20% due to the fact that they read meters once every two months. The accuracy only improves after 3-6 months as actual meter reads are collected for a significant percentage of customers. Such inaccuracy itself would add significantly to UFG unless appropriate mechanisms were put in place such as washups and seasonal residual profiles. Other issues affecting reconciliation are : - oil contamination that is believed to have affected gate meter data in at least one instance - meter owners and retailers failing to ensure that details such as multipliers and other critical site details are passed on to new retailers at the time of switching or installation
Tetenburg	Most of the corrections are about poor data quality (egs: meter read error, incorrect estimates for Grp4s, meter failures, TOU failures, etc). Normalising data might improve data quality, or it may just complicate matters further. There is a perceived need for all retailers to normalise, but is this really necessary? 12 months of commercial allocations would be very close to the actual 12 months of consumption. The initial Rec Code intent was for the TOU & Grp 4 to remain unadjusted in any way, so that it was clear that only the Grp 6 had any estimation component. Data quality is not just about readings in billing systems being converted to energy accurately. There needs to be measures in place which monitor that metering equipment test results are trending towards improved accuracy, and that when results are outside the limits, that retailer invoicing, allocation & network charging are all backdated sufficiently to correct for the problems. The registry project may clear up a lot of the switching problems, but are the network registries being constantly checked against retailer billing systems to identify unassigned ICPs? Does checking for disconnected ICPs still using gas take place, and by whom? Only when all the basics are being covered off by all parties will there be a reduction in UFG, the key performance indicator.
Powerco	Having observed the Reconciliation and Allocation process with the Allocation Agent, it is our perception that all retailers generally (especially the smaller ones) actually provide good data. The problem with data quality is two fold: • Firstly, while the Reconciliation Code specifies the format that data should come into the Allocation Agent in, from observations of the processes, there is little adherence to this. As a result of the different formats, some parties are providing a great deal of information while other parties provide very limited detail. • Secondly, due to the spectrum of data provided it is impossible to state with certainty what the underlying source of the data is. Thus it is likely

	the Allocation Agent is unknowingly receiving both normalised and as billed data at present. Of course, data quality is further exasperated by a lack of a central registry which would record ICP tenures and would assist identifying ICP's which are not being accounted for by a retailer
MRP	"Poor quality data", reaches the allocation agent because of a number of technical reasons (aside from inadequate systems): a. Referencing problems - there is no clear reference published that assigns the appropriate Gas Gate to an ICP (or vice versa). This leads to confusion to as to what Gas Gate consumption volume should be submitted against by retailers. The necessity of this does not seem to be recognised by the gas pipeline owners. b. The current allocation system forces retailers to submit their volumes on an "As Billed" basis which can vary by 20% from the final calculated volumes for a consumption month. This is especially the case in the months when large seasonal swings in consumption occur.

Q11 Should the Gas Industry Co introduce formalised, regular wash-ups of month end allocations after 4 or 6 months and after 12 months following the month in question?	
Vector	*Response to question 11:* Probably, but only once it has considered other issues prior to this one. *Additional comments of relevance in Vector's cover letter:* [Para 5] Care is needed when recommending any change to current wash up periods. There are significant upstream implications, and costs involved and these factors would need to be taken into consideration. [Para 17] One of the initiatives the GIC has suggested as a possible improvement to the allocation and reconciliation process is to increase the frequency of wash ups. [Para 18] Vector would like to ensure the GIC is aware of the implications involved in suggesting wash up periods of increased infrequency. Wash ups can become extremely complex, involving upstream allocations, which flow on to mismatch, transmission charges and potential gas balancing charges. [Para 19] Before any discussion on wash up frequency can occur, the industry will need to establish a methodology for settling any wash ups established.
Contact	Yes. Allocation submissions include daily metered (DM) energy quantities for allocation groups 1-2, and non daily metered (NDM) energy quantities for allocation groups 3-6. For group 3-4 sites which are required to be read at or close to month end, the read-read consumption is currently deemed to align with the allocation period (calendar month, was initially last business day month). This natural misalignment of the read-read period with the calendar month can result in errors of up to + or – 6.7%. For group 5-6 sites there is no mandatory formula for production of monthly estimates, and even if there was it would be unlikely to produce estimates materially aligned with actual deliveries due to the need to estimate forward for substantial periods for many of the contributing ICPs. To achieve material alignment between allocations and deliveries for NDM sites, Contact considers that there should be a revision process and mandatory formula for allocating actual read-read energy quantities to the days in between by applying a seasonal shape. Furthermore Contact considers the allocation agent should have no discretion as to the processing of revisions as is the current position for "corrections". In effect this would result in: • Initial allocation quantities based on estimated deliveries for the calendar month produced shortly after month end, these would be 100% forward estimates; • Revisions based on a mix of materially accurate historic estimates (using a mandatory formula which allocates actual read-read energy quantities to the days in between by applying an all-time seasonal shape provided by the allocation agent from the last allocation), and forward estimates for any period post the last actual read; • Materially accurate allocations would be achieved when the % of historic estimate volume is close to 100%. Contact's analysis indicates that with a standard read frequency of monthly for group 3-4 sites, and bi-monthly for group 5-6 sites, a 4 month revision would achieve close to 100% historic estimates while a 12 month revision would clean up any residual including correction of prior period

	errors older than 4 months. The key objective, however, should still be to get high quality data in the initial submission. It is noted that this is difficult given the tight submissions timeline - effectively close of business 3rd business day.
Genesis	Yes. Genesis Energy would like to see a 6 month and 12 month wash-up implemented. Genesis Energy's investigations show that its data improves and shows very little change from 6 months onwards because of the increased number of actual reads for our customer base. Any wash-up period would need to be formalised, structured and flow through from Retailers to the Allocation Agent, Distribution companies and Transmission.
WGL	Yes, however we are already concerned about the administration costs associated monthly network wash ups from network companies that scale retailer's monthly returns. This results in ongoing monthly wash ups which is time consuming and costly. As an example one network company alone submitted a total of 21 invoices to WGL in December last year. Whilst appreciating that network scaling is part of the agreements that we have with the individual networks WGL would like to see the end of network scaling and any wash up accounts, including networks, to be based on the allocation wash up process.
GasNet	If the cost of such is cost effective and of real value then GasNet would support this. The question is what is the appropriate frequency before it becomes uneconomic.
Nova	We think that the industry should introduce a limited number of washups. A 4 month and a final 12 month washup we believe are appropriate. In addition, we believe that seasonal residual profiles should also be introduced as a requirement where a retailer does not read sites meters at or near month end. Seasonal residual profiles would serve a similar function as "Q files" in the electricity industry and would support retailers who desire to read customer meters infrequently and at times other than at month end without impacting on accuracy of reconciliation.
Tetenburg	6 & 12 months would be best. However, this again would require that retailers actively participate towards timely resolution of any/all problems identified. These timeframes must also apply to the gate metering operator.
Powerco	Yes. Powerco currently performs wash-ups at six months and at twelve month intervals following initial bill. However, because the gas periods are not officially closed-off, it is difficult under the current regime to encapsulate (with certainty) all retailer volume changes.
MRP	Regular wash-ups would assist in rectifying the confusion caused by the referencing problems identified in [question 10(a)] above and would remove the problems caused by the variance described in [question 10(b)].

Q12 Is it appropriate, as part of the initial changes to allocation arrangements, to require all retailers to read every non-TOU ICP at least once in every twelve month cycle?	
Vector	Yes. Improving data quality going into allocation needs to be the major initiative.
Contact	A better option would be an output related measure, e.g. to require the last revision to include 100% historic estimates.
Genesis	As a general principle, Genesis Energy considers that the Gas Industry Company should not focus on *how* retailers undertake their business operations, but should instead be strongly focused on ensuring that the right outcome – that of ensuring that high quality data is being submitted into the reconciliation process – is being achieved. This provides retailers with the appropriate incentive to innovate in their operational practices while achieving the desired outcome. Focusing on prescriptive approaches reduces the scope for innovative practices by requiring all retailers to do this same thing. This in turn reduces the point of difference on which retailers can compete. Whether to focus on achieving an outcome, or enforcing a common input practice can only really be determined by the factual circumstances of the situation and the relative level of risk involved in each. Genesis Energy's current assessment of which path to take is that the risks of focusing on the delivery of the outcome is too high given the lack of maturity of the gas industry, relative to say the electricity industry where the outcome focus is about to be adopted in its new reconciliation process. Having said that, the Gas Industry Company should remain open, at some later stage, to assessing the merits of an outcome-focused approach. In the short-term, in terms of implementing the input approach, the Gas Industry Company should ensure that exceptional circumstances where retailers are unable to gain access to the site can be accommodated when finalising the details surrounding this.
WGL	*Response to question 12:* The Electricity and Gas Complaints Commission's Code of Practice requires retailers to read all meters at least 4 time a year. WGL would suggest that for consistence this would be the more appropriate minimum. *Additional comment in cover letter regarding meter requirements:* From previous GART papers I am aware that the issue of the threshold for customers with time of use metering was discussed. These discussions centred on the possible lowering of the threshold from 10TJ to 5TJ. Given the need for quality information to minimise mismatches with Maui Open Access I believe that this option should, if it has not already been done, be developed to the point to allow us to determine how many customers and how much annual load would fall within the new threshold. It would then be possible to determine if there would be a cost benefit in the installation of time of use metering for customers with an annual consumption of 5 TJ – 10 TJ.
GasNet	The greater the period of estimating the greater the potential variance between as billed and as metered. Providing the method of correcting this is accepted and adopted by the industry the GasNet is not concerned with the frequency of meter reading. The same issue would exist with 2, 3 and 6 monthly reads so the same method needs to be in operation, it just becomes an issue over the scale of the difference.
Nova	Yes.
Tetenburg	I would expect 4 per year, or 6 per year minimum. If only once per year, how can a retailer estimate between summer/winter usage, when only an annual quantity is known? How can Alloc Grp 6 be more accurately estimated each month? How do you normalise? The question seems to suggest that some are not even making it annually. Non-TOUs > 250 GJs per year are currently required to be read every month "at or close to monthend".

Powerco	Yes. The more frequently meters are read, the better data quality. This aligns with the electricity industry.
MRP	Mighty River Power advocates that: a. There should be quarterly reads as an absolute minimum. We believe that more frequent reading of meters is to be encouraged, as it gives rise to improvements in accuracy of both allocation and billing, benefiting both the market and the customer. b. The GIC should establish accuracy criteria for estimates. c. The GIC should introduce a requirement that submitted data contains a minimum percentage of historic read data - the way forward is to increase the frequency of meter reads.

Q13	Should the Gas Industry Co establish accuracy criteria for estimates (in conjunction with an appropriate compliance regime)?
Vector	Yes. Improving data quality going into allocation needs to be the major initiative.
Contact	Because of the upstream effect of corrections or revisions, it is appropriate to set accuracy criteria for estimates. It is noted the electricity industry currently has an accuracy requirement for the initial submission (containing 100% forward estimates) of + or – 15% of the final submission, by NSP.
Genesis	See our response to Q 12 above. Genesis Energy considers that this concept has merit in theory however additional detail will need to be developed for further industry comment.
WGL	WGL believes that the GIC should go further and mandate a single estimating process for the Industry.
GasNet	GasNet supports the establishment of accuracy criteria for estimates but is not concerned who does it as long as it is universally applied.
Nova	Yes, although from a compliance perspective, we believe that if participants breached certain criteria repetitively and caused financial injury to others as a result, then in a contractual governance regime, parties should be able to resolve this through the Courts. There are also other solutions, such as 'use of money interest' that could be imposed when washups are performed.
Tetenburg	If all retailers can agree on these accuracy criteria, and there are systems in place to ensure these criteria are being adhered to, then yes.
Powerco	Yes.
MRP	See response to question 12.

Q14 Is it appropriate in the longer term (after the initial changes are made to the allocation arrangements) to introduce a requirement that submitted data contains a minimum percentage of historic read data?	
Vector	Yes. Improving data quality going into allocation needs to be the major initiative.
Contact	Because of the upstream effect of corrections or revisions, and the effect on other shippers, it is appropriate to set criteria for historic estimate percentages. It is noted the electricity industry is proposing requirements for subsequent revision submissions of: • 80% historic estimates at month 3 revision • 90% historic estimates at month 7 revision • 100% historic estimates at month 14 (final) revision The closest equivalent for gas would be 85% for month 4 and 100% for month 12.
Genesis	This concept also has merit in theory however additional detail will need to be developed for further industry comment. In particular, Genesis Energy believes that having this requirement on the initial file may not deliver the outcomes the Gas Industry Co intends. Genesis Energy considers that this type of requirement would be beneficial to measure subsequent wash up file volumes against the initial file.
WGL	In general yes. Historical data does not however allow for increases or decreases in the customers' installed load. WGL would suggest that these issues could be addressed by the introduction of a single estimating process applied across the industry.
GasNet	If this assists the allocation process the GasNet supports this, however this is by definition only history and does not assist in instances where there has been changes in load or usage not evident in historic data.
Nova	Yes, Such data should be reported to the allocation agent on a regular basis.
Tetenburg	As above in Q13. Also, if the UFG%s is not coming down, there may be a need to increase the amount based on real reads.
Powerco	Yes.
MRP	See response to question 12.

Q15 Is it appropriate in the longer term to introduce a standardised data transfer format?	
Vector	Yes. Improving data quality going into allocation needs to be the major initiative.
Contact	It is noted that the upstream industry has already established a standard for the exchange of data. This standard has been adopted for OATIS. The standard is set out on the website www.gas.org.nz. However one of the key needs is for a common library of terms to be used by the industry for use in codes, rules and regulation. It would also be sensible to achieve reasonable consistency between gas and electricity where appropriate – e.g. losses, loss factors, UFG, loss ratio.
Genesis	Yes. However, Genesis Energy does not understand why this is a longer term issue, particularly in light of the Gas Industry Company's own recognition that "Data quality issues are exacerbated by the lack of a standardised format for submitting data to the allocation agent." Genesis Energy fails to see (other than the fact that this may not quite meet the Gas Industry Company's criteria of being an 'easy fix') what factors would prevent work on standardising data formats, from being a success. Therefore, Genesis Energy suggests that the Gas Industry Company should move forward with this as a matter of some urgency.
WGL	Yes, however we would suggest that this is a short term rather than a long term issue. The Reconciliation Code working group agreed to this a number of years ago, however the group could not decide on the information to be contained within the files or on the format of the files. WGL believes that a non involved third party such as the GIC would be an idea party to develop these file formats.
GasNet	Yes although GasNet would support this in the short term and questions why it is considered to be appropriate only for the long term?
Nova	Yes. We believe that this is a relatively straight forward process, especially as there is only one allocation agent currently, and should be introduced sooner rather than later. If the industry pursues such developments as global reconciliation, washups, seasonal residual profiles, and meter reading performance reports then standard formats will be important given the increased frequency and volume for data being transmitted.
Tetenburg	Yes, agreed, although so far, the number or errors introduced via the non-standard formats has been minor.
Powerco	Yes. See Q10. The purpose of the Gas Information Exchange Protocols (which are the gas equivalent of electricity EIEP protocols) is to facilitate the transmission of data between retailers. Notwithstanding this, there is no reason they could not be used to transmit data between retailers and the allocation agent, and from the allocation agent to distributors. It is noted on page 12 that Distributors do not use the output from the Allocation Agent – this is incorrect in Powerco's case, as we scale volume up or down to arrive at the reconciled quantities from the reconciliation process.
MRP	Any regular flow of information benefits from a standardised data transfer methodology, this is no exception.

Q16 Do you agree that the two main options that should be considered for making allocation and reconciliation arrangements mandatory and enforceable are a modification of the existing contractual arrangements, and Ministerial rules under the Gas Act?	
Vector	Yes.
Contact	A combination of the two main options should be used. That approach would use the industry to develop the arrangements, while the development process should be under the umbrella of and facilitated by GIC. If this approach fails to yield an industry-agreed result within a reasonable time then GIC should use its regulatory powers to resolve the matter. Given the track record of the downstream industry in progressing development of the Reconciliation Code, and improvements to retail market arrangements and/or amendments to the Reconciliation Code, it would suggest the above approach is likely to fail without setting rules under the Gas Act. However having the GIC to oversee improvements, and with the ability to threaten Ministerial rules if adequate progress is not achieved, provides a more positive environment in which to move forward. Furthermore it will incentivise participants to achieve sensible and timely solutions, and compliant behaviour. Contact also considers that greater transparency is an effective mechanism for achieving compliant performance by highlighting poor performance or issues at an early date so they can be dealt with on a timely basis.
Genesis	Yes.
WGL	Yes but the arrangements must include an independent governance arrangement.
GasNet	Yes
Nova	Yes
Tetenburg	Modifying the contractual arrangements is difficult, as the current rules are almost a “cut off your nose to spite your face” situation. In Alloc Agmt, if a party does not comply, then they are to not receive allocation services. But in doing this, you not only punish the offending party, but all other trading retailers. In the network situation, you would have to cut off gas supply, thus reducing your network income. The right disincentives need to be found to enforce the rules.
Powerco	Powerco has no comment on this point.
MRP	Yes. In respect of governance arrangements, Mighty River Power prefers a multilateral contractual approach to a rules based approach. However, we acknowledge that if a multilateral approach does not work then rules should be implemented. Irrespective of whether the approach is contract or rules based, we see the role of the allocation agent as only compiling and determining allocation data. We consider the governance and compliance function must sit with the GIC, whether authorised by multilateral contract or rules. Accordingly, we favour the second and third options referred to at paragraph 10.6 of the GIC’s options paper (with the third option backing up the first). Whether multilateral agreement can be reached in respect of the GIC’s role will determine whether rules are required.

Q17 Do you agree that potential problems with pipeline owner leverage and Commerce Act risks associated with the contractual arrangements favour the Ministerial rules solution?	
Vector	*Response to question 17:* In this case there are incentives on a number of industry players that lead to the conclusion that rules should be recommended. *Additional comments of relevance in Vector's cover letter:* [Para 6] Vector agrees that in the case of Allocation and Reconciliation, the GIC should recommend the formation of rules to the Minister, based on the Reconciliation Code. [Para 20] Vector has previously submitted to the GIC on similar issues regarding an appropriate approach to the establishment of a central registry for gas ICP's. In that submission Vector outlined the need for relativity in considering whether to go straight to regulations or whether industry based agreements would be suitable. [Para 21] In this case, Vector agrees with the GIC that the recommendation of rules to the Minister is appropriate, and that the Reconciliation Code become the basis of any rules going forward. Vector believes that the issues involved in reconciliation are such that the incentives on industry players not to comply are sufficient to move directly to a rules based approach.
Contact	We are not, at present, convinced that the Ministerial rules approach is necessary. Increased bureaucracy, higher costs, less flexibility and the stifling of innovation associated with that approach make it unattractive. The industry should have the opportunity to employ the alternative approach. That effort would not be wasted even if the Ministerial rules approach was adopted as inevitably the industry will need to develop the rules. The Commerce Act risks appear overstated. Most of the organizations involved in developing the MPOC obtained advice on whether the MPOC raised Commerce Act concerns. The companies were sufficiently reassured to allow development of the MPOC to continue. It should be noted that the Minister of Energy invited MDL to implement the MPOC after his officials had reviewed it.
Genesis	*Response to question 17:* Given the information provided by the Gas Industry Company, Genesis Energy would concur that the issues outlines would, on the face of it, appear to tip the balance in favour of rules-based approach. However, while Genesis Energy is inclined towards rules-based solution in this instance (as set out in the cover letter), Genesis Energy has two comments: 1. Genesis Energy recognises that this current consultation paper outlines the Gas Industry Company's preliminary views on the direction that should be taken and that it is not intended to be incorporate a cost-benefit analysis. Therefore, Genesis Energy expects the Gas Industry Company in its next consultation document on the issue of allocation and reconciliation arrangements to demonstrate in net-benefit terms why it considers that a rules-based arrangement is better than the mitigation of risks via a contractual arrangement. Only when this analysis is shown can Genesis Energy make an informed determination as to whether rules is in fact, the better solution; and 2. It is easy for the Gas Industry Company to raise the spectre of Commerce Commission intervention as a negative element of pursuing an industry-based arrangement – once the Commerce Commission has accepted jurisdiction the process can become much more complex and costly. And the generality of the Gas Industry Company's arguments are difficult to rebut as a set of propositions. However, it is their very generality that is their weakness – despite the Gas Industry Company's level of knowledge of what it wishes to eventually implement, the Gas Industry Company fails to contrast this with other previous factual examples, nor does it give an assessment of the probability of the Commerce Commission seeking jurisdiction. This would have been helpful.

	Additional comments in the cover letter: In essence, Genesis Energy considers that there are certain fundamental elements to the overall architecture of the gas industry that are best placed in rules. The allocation and reconciliation arrangement is one of these fundamental elements. In Genesis Energy's view, in this instance, rules are more likely to deliver on the objectives of the Gas Act and the Government Policy Statement and will provide greater certainty and lower the overall commercial risk profile of the industry. This in turn will provide end-consumers with greater confidence in gas industry processes. Genesis Energy looks forward to the Gas Industry Company's cost-benefit analysis in the next consultation paper on this issue. Having said that, Genesis Energy does have some concerns regarding the process surrounding the delivery of its consultation paper. … Genesis Energy recognises that there is a balance to be struck between the amount of effort that the Gas Industry Company puts into an issue and the resources that industry participants can bring to bear in responding. Genesis Energy contends that in general, it is more appropriate for the industry to hold the resource, rather than the Gas Industry Company. However, having said that, Genesis Energy considers that the Gas Industry Co should give more consideration, where necessary, to the tangible benefits from the consideration of draft consultation papers by an appropriate working group. These benefits relate to the direct application of industry expertise, industry buy-in to the issues and socialisation of them within participant's organisations, and the containment of consultancy costs.
WGL	Not necessarily, however in this instance WGL believes that the governance issues would be better and more effectively addressed through a Rules arrangement.
GasNet	GasNet supports the rules solution
Nova	No. To date pipeline owner leverage has not played a significant part in the problems that are being experienced with the current arrangements. The Commerce Act risks are overstated and imply that current arrangements potentially breach the Commerce Act. Progressing to immediately to a regulatory arrangement will result in: - additional costs through governance overhead at the GIC and in retailers due compliance requirements - retention of inefficient rules due to a slow rule change process Nova gas has commented more fully regarding this topic in our submissions relating to central registry and switching proposals.
Tetenburg	Rules appear to be the way to go.
Powerco	Powerco has no comment on this point.
MRP	In respect of pipeline owner leverage, historical behaviour would suggest that reaching contractual agreement will be difficult. However, in terms of following appropriate co-regulatory governance processes, attempting to find consensus is an important first step. It may take a little longer, and still result in the making of rules, but it will ensure issues and positions are properly canvassed and, should rules be necessary, assist parties in accepting that rules are necessary. Mighty River Power acknowledges that Commerce Act risks exist. However, the GIC's analysis is undeveloped in that it does not access the risk associated with actual pipeline owner behaviour. Accordingly, Mighty River Power is not able to properly assess from the GIC's analysis the degree of risk in relation to Commerce Act concerns.

	Mighty River Power notes that the use of multilateral contractual arrangements to facilitate governance arrangements will always result in Commerce Act risks, regardless of industry. Mighty River Power is concerned to see that such risks are not overstated. Accordingly we recommend that the GIC produce a detailed analysis of Commerce Act risks, such that participants are able to effectively assess the Commerce Act risks associated with a multilateral approach.

Appendix C: Terminology

Common Term	Description
Allocation Agent	The party appointed under an allocation agreement to determine allocated and reconciled quantities of gas at a gas gate station.
allocation agreement	An agreement between the users of a shared gate station and their appointed allocation agent which sets out the method of allocation and terms of appointment.
DDP	Dynamic Deemed Profile – means a deemed profile that changes in accordance with information obtained from TOU metering at one or several sample sites representative of the demand of one or more distribution network delivery points.
GART	Gas Allocation and Reconciliation Team.
Gas gate	The point at which gas flows from a high pressure transmission pipeline into a low pressure distribution pipeline.
GPS	Government Policy Statement on Gas Governance dated October 2004.
HP Invent Report	"Allocation and Reconciliation in Overseas Gas Markets" report prepared for Gas Industry Co in May 2006 by HP Invent.
ICP	Installation Control Point – the point at which gas leaves a distribution network and enters a customer's installation.
June Discussion Paper	Gas Industry Co discussion paper dated June 2006 titled "*Options for Amending Allocation and Reconciliation Arrangements in the New Zealand Gas Industry".*
MPOC	Maui Pipeline Operating Code – available at www.mauipipeline.co.nz/extras/pdf/Maui%20Pipeline%20Operating%20Code.pdf.
Receipt Point	The location where gas enters a transport system and possession, control or ownership of gas passes from one party to another.
Reconciliation Code	The code that has been established to assist the development of a competitive gas market by providing a uniform process for customer transfers between competing retailers, and allocation and reconciliation of gas quantities between users at Receipt Points into a transmission system or distribution network at which possession, control or ownership of gas passes from one person to another.
Regulatory Objective	Gas Industry Co's objective for this review as defined in paragraph 3.13 of this paper.
RPR	Receipt Point Residual – means the residual throughput at a gate station after deducting TOU and static deemed profile quantities from total gate station quantities.
SDP	Static Deemed Profile - means a pre-determined estimate of the quantity of gas an end user will take on each day, and which for month end allocation purposes defines the daily profile through a particular month.
TOU device	Metering that has associated data logging facilities to allow meter readings to be recorded at pre-determined intervals.
UFG	Unaccounted For Gas - means the long term difference between the metered quantities of gas entering a transport system at a receipt point and the metered quantities of gas leaving the transport system at a delivery point, expressed as a percentage of the metered quantities of gas entering the transport system at the receipt point.

Appendix D: Possible framework of Regulatory Approach

D1 The purpose of this Appendix is to provide a provisional outline of how a downstream reconciliation regime may be structured under a regulatory arrangement. This Appendix aims to provide sufficient structure and substance to enable submitters to be able to appreciate some of the expected detail of such a regulatory arrangement. This framework would be progressed (for example, to appropriately take into account industry feedback) and then used as a starting point for lawyers to draft formal rules and regulations. Submissions are welcomed on any aspects of this Appendix.

D2 This Appendix includes the preferred approaches detailed in the Discussion Paper for addressing the problem areas and includes aspects of the current downstream reconciliation regime where there are no proposed changes (for example, the allocation groups and timeline for monthly allocation).

Overall structure

D3 It is envisaged that:

- rules would cover all of the reconciliation matters discussed in the discussion paper except for the compliance regime; and
- regulations would cover the compliance regime.

Rules to cover reconciliation matters

Purpose and scope

D4 The purpose of the rules would be to establish a set of uniform processes for downstream reconciliation and allocation of gas quantities.

D5 The rules would need to provide for:

- appointment by Gas Industry Co of an Allocation Agent to undertake certain downstream reconciliation and allocation functions at each gas gate, of behalf of all affected gas industry participants;
- reconciliation of monthly gas gate injection quantities provided by transmission owners with the sum of the gas consumption quantities provided by retailers;
- allocation of the monthly gas injection quantity amongst the retailers supplying consumer installations from each gas gate, and
- mandatory information disclosure and reporting requirements by various participants to ensure allocation and reconciliation can occur, and be used, effectively.

Implementation

D6 It is envisaged the new arrangements would start from the start of a gas year. At this stage, the likely “go live” date would be 1 October 2008. Prior to commencement, the

rules would need to be Gazetted and a number of other steps taken (e.g. appointment of the Allocation Agent). Gas Industry Co expects to allow at least 6 months for implementation. This timeframe is necessary to allow appointment and establishment of the Allocation Agent but also to allow industry participants sufficient opportunity to update their systems.

Definitions

D7 Drafting would try to use consistent terms to those defined in the Gas Act, defined in other gas rules and regulations, or as proposed in the switching rules.

Participants - coverage

D8 It is envisaged that the following persons would be "allocation participants" and have obligations under the rules:

- retailers (e.g. providing monthly information on monthly or daily quantities of gas consumed by their consumers);
- distributors (e.g. providing gas gate and distribution system information as required by other participants);
- meter owners (e.g. providing metering equipment information as required by other participants and if requested by an auditor);
- transmission owners (e.g. providing daily gas injection information for each gas gate);
- Gas Industry Co (e.g. appointing Allocation Agent and auditors); and
- certain obligations of the Allocation Agent (e.g. using reasonable endeavours to provide prescribed allocation services according to set timeframe).

D9 As discussed further below, other obligations such as the terms of appointment (including charges) of the Allocation Agent and auditors would be specified in the "service provider" contracts agreed between the Allocation Agent and Gas Industry Co or the auditor and Gas Industry Co.

Allocation participants – key obligations

D10 The rules would specify that all allocation participants have overarching obligations with regard to:

- Acting reasonably and cooperatively with other participants to ensure that gas is allocated in a fair and equitable manner; and
- Providing required information in an accurate and timely fashion.

D11 There would also be numerous specific obligations that would apply to particular classes of allocation participant. These are discussed in more detail below.

Allocation agent

Appointment

D12 The rules would require Gas Industry Co to appoint an Allocation Agent to provide allocation services as prescribed in the rules. The appointment process would be similar to the "service provider" model used in the electricity industry. The rules will include some high level requirements such as:

- conduct a competitive tender;
- appoint for an initial term of five years; and
- publish the service provider agreement established with the allocation agent.

D13 However, the appointment contract would detail most of the key terms of appointment (e.g. charges, performance criteria and reporting requirements).

Definition of allocation services

D14 The rules would need to specify the allocation services to be provided by the Allocation Agent. These would likely include:

- calculation and reporting of the allocations of daily gas purchases according to a specified processes (see schedules I & II); and
- deemed profile registration and deregistration according to specified processes (see schedule IV).

D15 The processes in the schedules would be specified in the rules.

Derivation of energy consumption information

General requirements

D16 Under the rules, each retailer would have an obligation to deliver complete and accurate energy consumption information to the Allocation Agent – with the consumption information provided derived (under normal circumstances) from actual readings and not adjusted for any losses associated with the metering equipment or the distribution system.

D17 A retailer would be required to make a forward estimate of consumption where there is no actual reading that either coincides with, or is dated later than, the end of the month for which an allocation is being performed.

D18 Consumption information provided for a calendar month would be deemed to be from 0000 hours of the first day to 2400 hours of the last day of the month, irrespective of the time of day that any actual reading used to quantify the consumption was taken. The same start and end hours would apply to any consumption information relating to a part month.

D19 Consumption information relating to consumer installations with ToU metering would be required to actually align with the 0000 hours and 2400 hours start and end times.

D20 The rules would spell out that in the event of a gas registry being in place and acknowledged as database of record for reconciliation and allocation purposes, then

the relevant ICP event dates in the registry would dictate the periods for which a retailer would compile consumption information.

Consumption measurement requirements

D21 The rules would specify that in order to provide accurate energy consumption information to the Allocation Agent for reconciliation and allocation, retailers would need to apply the following metering type and meter reading frequency minimum requirements according to the size of the consumer installation:

Size (Expected Annual usage)	Metering Type	Reading frequency
>10 TJ	ToU (day-interval data logging)	Daily logging with month-end collection.
>250 GJ ≤10 TJ	Standard	Month–end
≤250 GJ	Standard	≥ 95% of meters at each gas gate to be read once per gas year quarter and 100% to be read once per gas year

Consumption information identified by allocation group

D22 The rules would require that energy consumption information provided to the Allocation Agent would be identified according to the allocation group to which it relates, and those groups would be defined as follows:

Allocation group	Metering features	Basis of daily energy consumption information for allocation
1	ToU with telemetry	Actual daily quantities.
2	ToU without telemetry	Actual daily quantities.
3	Standard meter	Actual month quantity profiled to days by static deemed profile (SDP).
4	Standard meter	Actual month quantity profiled to days quantities by gas gate residual profile (GGR).
5	Standard meter	Estimated month quantity profiled to days quantities by dynamic deemed profile (DDP).
6	Standard meter	Estimated month quantity profiled to days quantities by gas gate residual profile (GGR).

D23 The rules would acknowledge that although consumer installations >250GJ are required to be read at month-end and that allocation groups 3 and 4 are defined as metered to provide actual month energy consumption information, their meter readings will often not coincide exactly with that time and date reading requirement. It is possible that small deviations (e.g. one or two days at either end) would not be considered a material breach in relation to the compliance regime.

D24 The rules would also require that once an adjustment to 'actual' consumption information for an allocation group 3 consumer installation exceeded some threshold, it would no longer be eligible to be reconciled as part of allocation group 3. In such circumstances, the consumer installation would be treated as part of allocation group 4.

Metering equipment accuracy

D25 The rules would require that all metering equipment used to derive consumption information would need to comply with the accuracy requirements specified in NZS 5259:2004. That is the meter equipment would be classed as accurate if:

- it didn't exceed the margins of error specified in NZS 5259:2004; or
- verification of its accuracy was done in accordance with NZS 5259:2004.

D26 A retailer using metering equipment that didn't comply with NZS 5259:2004 would be in breach of the rules.

Normalisation of energy consumption information

D27 The rules would require that, where the meter readings for a consumer installation do not coincide with the calendar month that an allocation is being performed for, and where actual meter readings that span the month are available, the retailer must normalise the consumption information before providing it to the allocation agent.

D28 The normalisation would be performed on a simple pro-rating basis, prior to application of any profile to the monthly quantity. This means that:

- the average daily quantity measure between actual meter readings would be used to add or deduct quantities of energy (as the case may be) to produce a normalised month of energy consumption; and
- unless approved by Gas Industry Co no seasonal adjustment profiles would be used in the normalisation process.

D29 The rules would require each retailer to ensure that the consumption information provided in the final consumption information submission to the Allocation Agent was derived 100% from actual meter readings and the prescribed normalisation processes.

Application of deemed profiles

D30 The rules would specify that for each allocation group 3 or 5 consumer installation, the retailer would apply the applicable (registered) SDP or DDP profile after any required normalisation of the month's data before submitting the consumption information at the allocation group level to the Allocation Agent.

D31 Retailers would be required to provide not less than 10 days' prior notice of a change of the profile to be used for deriving the daily consumption information for a consumer installation. And, subject to complying with that notice period, a retailer would be able to apply a different registered profile in an interim or final allocation than it applied to a previous allocation.

D32 A retailer would be able to use only profiles that are registered in its name and only for production of daily energy consumption information for consumer installations that match the characteristics of consumer installations for which they are registered. Participants would be bound by the decisions of the Allocation Agent regarding registration, contest, review or deregistration of any deemed profile.

Delivery of energy consumption information to Allocation Agent

D33 The rules would specify that, in respect of energy consumption information relating to the immediate prior calendar month (month 1), each retailer would, by 0800 hours on the third business day of each calendar month, deliver to the Allocation Agent:

- Daily energy consumption information for each consumer installation in allocation groups 1 and 2 for which it has purchased gas; and
- The aggregate estimated daily energy quantities by gas gate for allocation group 3 consumer installations, and the number of consumer installations included; and
- The aggregate estimated daily energy quantities by gas gate for allocation group 5 consumer installations, and the number of consumer installations included; and
- The aggregate estimated month energy quantity by gas gate for all allocation group 4 and 6 consumer installations.

D34 In addition, with respect of energy consumption information relating to the calendar months that ended 3 months prior (month 4) and that ended 12 months prior (month 13), each retailer would, by 0800 hours of the tenth business day of the calendar month, deliver to the Allocation Agent, energy consumption information for;

- Each consumer installation in allocation groups 1 and 2 for which it has purchased gas where the energy consumption information has changed since the previous submission;
- The aggregate estimated daily energy quantities by gas gate for allocation group 3 consumer installations, and the number of consumer installations included;
- The aggregate estimated daily energy quantities by gas gate for allocation group 5 consumer installations, and the number of consumer installations included;
- The aggregate estimated month energy quantity by gas gate for all allocation group 4 and 6 consumer installations; and
- in each case, the retailer would be required to note the causes for any significant changes since the previous submission (if known).

D35 In cases where, for reasons of metering or reading failure or error, the retailer could not compile actual energy consumption information for a consumer installation in allocation groups 1 to 4, the retailer would be required to submit its best estimate for energy consumption information, and identify the fact that it is an estimate, to the Allocation Agent. In such circumstances the retailer would still be in breach of the obligations that require the actual energy consumption information to be provided.

Process for downstream allocation and related matters

Allocation methodology

D36 The rules would specify a global method of allocation, requiring:

- each retailer to provide energy consumption information for all consumer installations that it supplies with gas;
- each transmission owner to provide daily gas injection information for each gas gate where it delivers gas.

D37 In the standard allocation sequence, the Allocation Agent would be required to perform three allocations for each calendar month. The three allocations for a particular month would be referred to as:

- the initial allocation (performed in month1);
- the interim allocation (performed in month 4); and
- the final allocation (performed in month 13).

D38 In addition to those three standard allocations, Gas Industry Co would be able to direct the Allocation Agent to undertake a special allocation for any particular month, at any time.

D39 The allocation process that would be specified is outlined in Schedule I.

Transmission owners to provide gas gate injection information

D40 Each transmission owner would be required, by 0800 hours on the third business day of each calendar month, to deliver to the Allocation Agent, daily volume injection information for each gas gate connected to its transmission system.

D41 In addition, to assist retailers in nomination of daily quantities, each transmission owner would be required to publish the estimated day-end energy injection quantity (GJ) for each gas gate that it delivers gas at 1200 hours each day and potentially also at another time if considered necessary for management of daily off-take (e.g. 1600 hours each day). Confirmation of the need for any such additional time and appropriate time would require industry input.

D42 As with the proposed gas registry rules, in the first instance the reconciliation and allocation process specified in the rules would not specifically accommodate embedded gas distribution systems. Consequently, there would be no obligation (at this stage) for distributors to provide gas injection information.

Distributors to annually recalculate and publish loss factors

D43 The rules would require each distributor to annually recalculate and provide to Gas Industry Co loss factors applicable to the gas gates on its distribution systems – one loss factor per gas gate per annum.

D44 The annual recalculation would be required to be performed and results provided to Gas Industry Co (for publication) not later than 1 July each year to be applicable from 1 October that year.

D45 The loss factor value would be derived from the energy consumption and injection information for each gas gate, as provided by the Allocation Agent and relevant transmission owner respectively, and from other relevant information possessed by the distributor.

D46 No specific process for calculation of loss factors would be specified in the rules. However, it is envisaged the calculation will likely involve averaging at least 12 months of data that has been appropriately adjusted for outlier events or involve some other calculation that is likely to result in an accurate estimation of the expected losses for the period to which the loss factor will apply.

D47 To avoid a commercial impasse, industry participants must notify the distributor and Gas Industry Co within 2 weeks of publication of the loss factor by Gas Industry Co if they consider the proposed loss factor is inappropriate and, in such circumstances, Gas Industry Co will determine the updated loss factor. Gas Industry Co will use reasonable efforts to publish the updated loss factor by 1 September and if there are continued issues regarding the setting of loss factors, Gas Industry Co will establish a work stream to consider introducing a standardised process.

Notices and information exchanges

D48 In addition to the requirements regarding each retailer's delivery of accurate and timely information to the Allocation Agent, the rules would include recognition of the importance of other information transfers between allocation participants.

D49 The reconciliation rules would be drafted in such a way that would not rely on a pre-existing functioning registry. However, they would likely include a rule which recognised that, in the event that a of a gas registry being established, compliance with the switching rules in relation to both switching and registry maintenance would also mean compliance with the relevant information exchange requirements of the reconciliation rules.

Retailer notice of intentions to the Allocation Agent

D50 A retailer would be required to provide at least five business days' prior notice to the Allocation Agent of its intentions to commence or cease purchasing gas from a particular gas gate.

Distributors to provide information to retailers

D51 For each consumer installation on its gas distribution system, the distributor would be required to provide the retailer supplying gas there or registry with the following information:

- ICP identifier;
- network pressure of the distribution system concerned;
- the loss factor;
- nominal altitude assigned by the distributor;
- gas gate code; and
- maximum hourly quantity that the installation is capable of drawing.

Meter owners to provide information to retailers

D52 For each consumer installation where the meter owner has metering equipment being used to measure consumption information, the meter owner would be required to provide the retailer supplying gas there or registry with following information:

- meter identifier;
- the number of dials on each of the meter and corrector registers in use;
- metering pressure; and
- the dynamic correction facilities applying to each register reading taken from the metering equipment.

Retailers to transfer information when switching

D53 Whenever the supply of gas at a consumer installation is switched between retailers, the retailer that is relinquishing supply would be required to provide meter register and (if applicable) corrector register reading information relating to the date of switch.

D54 The rules would require that the information transferred would be the same as that specified in the gas switching rules for the gas transfer notice.

Information Exchange

D55 The rules would specify the notices and information exchanges required under the rules. In particular, the rules would specify:

- information exchanges required in the absence of a gas registry and gas switching; and
- the energy consumption information provided to the Allocation Agent.

D56 The information exchanges will need to be in accordance with any format published on Gas Industry Co's website, from time to time. A Gas Data Formats Group will be established to develop and evolve any such data formats.

Governance structures

Audits and Special Allocations

D57 The rules would provide for Gas Industry Co to be able to require audits of allocation participant's systems and processes that affect any allocation participant's performance in regard to the reconciliation rules.

D58 In addition, Gas Industry Co would be authorised to require the Allocation Agent to perform a special (out of normal sequence) allocation for any allocation month up to 24 months after that month had its initial allocation.

Funding

D59 It is likely that participants would continue to pay allocation charges directly to the Allocation Agent. The types of charges will likely be similar to those currently specified in allocation agreements.

D60 The rules would require all other general costs associated with the reconciliation rules, including those related to compliance and rule amendments, to be funded by retailers and allocated between retailers. Gas Industry Co's preliminary view is that funding between retailers should be on the basis of market share proportion by number of ICPs. As discussed in the discussion paper, separate funding arrangements will be specified in relation to audits and compliance.

Rule amendment process

D61 The rules would not specify any specific process for future general rule changes (i.e. rule changes will occur through the statutory process specified in the Gas Act). However, in some instances the intention is (subject to confirming that it is a power that can be delegated) for Gas Industry Co to have authority for managing certain processes specified in the rules (e.g. maintaining information exchange file formats).

Transitional provisions / exemptions

D62 The rules are likely to include transitional provisions under which an allocation participant could be exempted from elements of the rules, provided the participant had good cause and met other conditions specified by Gas Industry Co.

D63 In particular, exemptions or transitional arrangement provisions might be applicable where participants need time to improve their systems to be able to comply with the rules.

Regulations to cover compliance

D64 A regulatory compliance regime would be implemented to support the reconciliation rules.

D65 As discussed in section 10 of the discussion paper, the regulatory compliance regime would have a similar structure to the switching compliance proposal. It is likely that this regime would be established through regulations (such as by means of an amendment to the proposed compliance regulations for switching).

D66 Section 10 discusses key aspects of the preferred compliance regime and how it may differ from the switching compliance proposal. For example, only some of the Allocation Agent's obligations would be subject to the compliance regime (such as process obligations). The regulations would specify limits of liability on key compliance bodies (e.g. the Rulings Panel) and on the Allocation Agent.

Contracts to cover Allocation Agent and Auditor appointment

D67 Key terms of the appointment of the Allocation Agent and Auditors will be addressed in the contracts they enter into with Gas Industry Co. For example, the Allocation Agent's service provider agreement will detail:

- the set of performance standards that the Allocation Agent must adhere to. It is expected the standards would be regularly reported against and reset on an annual basis (or as required);

- the means of setting the remuneration for the services provided by the Allocation Agent, including the method by which the initial or any subsequent systems developments by the Allocation Agent are recovered;
- the Allocation Agent's obligation to maintain insurance cover in respect of risks to the Allocation Agent's business;
- the Allocation Agent's exposure to liability under the agreement;
- support of any migration of the allocation and profile services to a successor party;
- scope for the Allocation Agent to provide (non-conflicting) services directly to participants or other parties (such as a day end allocation service);
- the Allocation Agent's obligation (with reasonable remuneration) to cooperate with investigations and audits instigated by Gas Industry Co;
- the Allocation Agent's obligation to report suspected rule breaches by allocation participants (the Allocation Agent will also have a mandatory obligation in the compliance regulations to report any rule breaches it is aware of); and
- Gas Industry Co's ability to audit the Allocation Agent's performance.

What won't be covered

D68 The rules would not cover how the results of the allocation process would be used for the settling of purchase obligations or in any other commercial arrangements.

SCHEDULE I – THE SPECIFIED ALLOCATION PROCESS

D69 The allocation process would specify the following for each month end allocation:

- receipt of the month-end daily energy injection quantity report for each gas gate, from transmission owners;
- receipt of month end (daily and monthly as applicable) energy consumption information reports from retailers;
- introduction of estimates, where participants fail to provide required data on time;
- calculation of the UFG factor for each gas gate, by dividing the month-end energy injection quantity by the sum of the month-end energy consumption information;
- calculation of the daily energy purchases information of allocation groups 1, 2, 3 and 5 for each gas gate and retailer, by application of the UFG factor to the energy consumption information;
- calculation of the month end energy purchases information of allocation groups 4 and 6 for each gas gate and retailer, by application of the UFG factor to the energy consumption information;
- calculation of GGR profile for each gas gate, by deduction of the daily energy purchases profile for allocation groups 1, 2, 3 and 5 from the energy injection profile;
- calculation of daily energy purchases information for allocation groups 4 and 6 for each gas gate and retailer, by application of GGR profile to the month end energy consumption information;
- aggregation of daily purchases information by gas gate for each retailer participant, to produce the allocated daily gas gate quantities;
- provision of the allocated daily gas gate quantities to all entitled parties, including the upstream Allocation Agent.

D70 The process specification would also allow or require (as is applicable) the Allocation Agent:

- to use its own estimate of the a consumption information in an allocation where a retailer fails to provide the required data on time;
- where consumption information has been estimated by the Allocation Agent and included in the allocation process, to include a notation with the published allocation results to advice participants accordingly;
- to advise all affected participants if it considers the results of any allocation that used Allocation Agent estimates resulted in a materially different allocation than would have been the case if the estimates were not necessary;
- to refrain from performing an allocation where its is not able (to its satisfaction) to obtain or estimate information required to perform a reasonably reliable allocation;

- to amend an allocation result provided the amendment can be made and advised to all eligible participants within one business day of first issuing the result; and
- to advise all affected participants of any material error in an allocation result that is not corrected within the one business day amendment window.

SCHEDULE II. - REPORTING OF RECONCILIATION & ALLOCATION RESULTS

Reports to retailers (allocation and profile information)

D71 By 0800 hours of the 4th business day of each month, for each gas gate:

- the daily gas purchases initially allocated to that retailer for the previous calendar month;
- the GGR profile.

D72 By 0800 hours of the 11th business day of each month, for each gas gate:

- an interim allocation of daily gas purchases allocated to that retailer for the calendar month four months previous, and the revised GGR profile;
- a final allocation of daily gas purchases for that retailer for the calendar month thirteen months previous, and the revised GGR profile.

Published Reports (injection, consumption and UFG information)

D73 At the same time as the reports are provided to the retailers, for each allocation performed each month, for each gas gate:

- the total gas energy injected for the month, as provided by the transmission owner;
- the aggregate of all energy consumption for the month as derived by the Allocation Agent from retailer submissions;
- the quantity and percentage of unaccounted-for-gas for the month; and
- the version of allocation that the information related to, i.e. whether the allocation from which the information was obtained was an initial, interim, final or special allocation.

Reports to Gas Industry Co (consumption accuracy information)

D74 By the 0800 hours of 11th business day of each month, for each retailer and gas gate, the difference and percentage difference accuracy information relating to the retailer's energy consumption information for the most recent quarter for which final submission information is available.

D75 The accuracy measurements would be performed on aggregated rolling quarter-year consumption information submissions. The formula that the Allocation Agent would use is provided in schedule V.

SCHEDULE III. - ALLOCATION PROCESS TIMETABLES

A. FOR INITIAL ALLOCATIONS

Deadline	Description
Prior to 0800 hours of 3rd business day	Retailers would ensure collection of metering information from all monthly interrogated consumer installations (including any at sample DDP consumer installations, if applicable).
By 0800 hours of 3rd business day	Retailers establish daily energy quantities for TOU, SDP and DDP consumer installations, and estimated energy quantities for the month for consumer installations read other than at month-end. Retailers provide data to the Allocation Agent, in the form prescribed under the rules. Transmission owners provide daily injection reports to the Allocation Agent.
By 0800 hours of 4th business day	Allocation Agent completes allocation as per the process outlined in schedule I. Allocation Agent provides allocated quantities to all entitled parties and the upstream Allocation Agent.

B. FOR INTERIM AND FINAL ALLOCATIONS

Deadline	Description
Prior to 0800 hours of 10th business day	Retailers ensure meter interrogation frequency requirements have been met for all consumer installations and allocation groups.
By 0800 hours of 11th business day	Retailers establish new daily energy quantities for each ToU, SDP and DDP consumer installation requiring revision, and estimated energy quantities for the month for consumer installations read other than at month end. Retailers provide data to the Allocation Agent, in the form prescribed under the rules, except that for ToU consumer installations only those that have changed are provided.
By 0800 hours of 11th business day	Allocation Agent completes interim and final allocations as per the process outlined in schedule I. Allocation Agent provides allocated quantities to all entitled parties and the upstream Allocation Agent.

SCHEDULE IV. - PROFILE REGISTRATION SERVICE & PROCESS

D76 The Allocation Agent would register and review the performance and applicability of deemed profiles employed by retailer participants in the production of daily energy consumption information submitted to the Allocation Agent.

D77 In the conduct of this service the Allocation Agent would:

- accept requests from participants for registration of deemed profiles and, after review of the information provided in support of that request, accept or decline the registration request;
- accept and deal with the contesting of the applicability of any deemed profile that is in current use by a participant;
- accept requests from participants to review an existing deemed profile, registered in the name of the requesting participant.

D78 To register a deemed profile, the Allocation Agent would need to be satisfied that the daily quantities that would result for the proposed DDP or SDP profile would be a reasonable representation of the actual consumption profile of the consumer installations to which it is to be applied. There would be a processing time of 10 business days for applications.

D79 Gas gate residual (GGR) profiles are a form of dynamic deemed profile that are exempt from registration, but created each month by the Allocation Agent as part of the allocation process.

Registration of a static deemed profile

D80 To register a static deemed profile (SDP) for use in the allocation process, the Allocation Agent would review the following information for the consumer installations that are to provide the basis of the SDP:

- full year of historical TOU data and estimated future variations; or
- in the absence of the full year ToU information:
  - sample historical TOU data, consumer installation operating information, 12 months' historical actual monthly usage data and estimated future variations;
  - estimated usage profile based on consumer installation operating information, 12 months' historical actual monthly usage data and estimated future variations;
  - estimated usage profile based on daily usage profile for a similar type of consumer and historical actual monthly usage data; or
  - estimated usage profile based on consumer installation operating or daily usage profile for a similar type of consumer.

D81 Where requested, and within 10 business days of receipt of the necessary information, the Allocation Agent would either accept or decline registration of the

SDP registration request. An accepted SDP would show the estimated daily usage in GJ across 12 months.

Registering a dynamic deemed profile

D82 To register a dynamic deemed profile (DDP) for use in the allocation process, the Allocation Agent would review:

- ToU data for the actual period of allocation for the sample consumer installation or consumer installations that are to provide the basis of the DDP; and
- sufficient detail of the consumer installations to which the DDP concerned would be applied, to verify the applicability of the profile to its intended use.

D83 Where requested, and within 10 business days of receipt of the necessary information, the Allocation Agent would either accept or decline registration of the DDP registration request submitted by a participant.

Contested deemed profiles

D84 If any participant wishes to contest a deemed profile, that participant would need to provide the Allocation Agent with whatever information it has to contest the profile's applicability to the consumer installations to which it is being applied.

D85 The Allocation Agent would determine whether the deemed profile was acceptable for the application as registered or whether it would be deregistered and the relevant GGR profile used in its place.

D86 The Allocation Agent would be required to make its determination within 20 business days of receipt of the contest request.

D87 In the event of a deemed profile being deregistered, the Allocation Agent would also determine the effective date of deregistration. All subsequent interim and final allocations would need to recognise that date in the daily energy consumption submissions.

Charges for deemed profile registration and review

D88 The costs of registration of SDP and DDP profiles would be borne by the participant requesting registration, and would be as per a schedule of costs included in the Allocation Agent's service provider agreement.

D89 The actual and reasonable costs of the Allocation Agent in respect of any review of a contested deemed profile would be recovered from either the participant requesting the review or (if as a result of the review the profile is deregistered) the participant owning the deemed profile.

SCHEDULE V. - CONSUMPTION INFORMATION ACCURACY MEASURES.

D90 The accuracy of energy consumption information provided by a retailer to the Allocation Agent would be measured by comparison of the participant's allocation groups 3 to 6 final submission information for each gas gate, with the information in submissions provided by that participant for the same month and gas gate in each of the two previous submissions (the initial and interim allocation submissions).

Difference accuracy measure

D91 Each participant's rolling quarter difference accuracy measurement for its gas gate consumption information submissions would be calculated according to the formula:

$QA_d = GQ_i – GQ_f$

Where:

QA_d is the accuracy difference measure for the quarter concerned;

GQ_i is the aggregate volume of gas gate consumption information submitted by the retailer for allocation group 3 to 6 (inclusive) consumer installations in the initial allocation submissions for the months in the rolling quarter concerned;

GQ_f is the aggregate volume of gas gate consumption submitted by the retailer for allocation group 3 to 6 (inclusive) consumer installations in the final submissions for the months in the rolling quarter concerned;

Percentage difference accuracy measure

D92 Each participant's rolling quarter difference accuracy measurement for its gas gate consumption information submissions would be calculated according to the formula:

$QA_p = 100 \times QA_d / GQ_f$

Where:

QA_p is the quarter accuracy percentage difference measure for aggregate of the final submissions relating to the quarter concerned.

Appendix E: NZIER Paper

See attached report prepared by NZIER titled *"Reconciliation of downstream gas quantities: Cost – benefit analysis framework"* dated 20 December 2006.

nzier
authoritative analysis

Reconciliation of downstream gas quantities

Cost-benefit analysis framework

Report to the Gas Industry Company

20 December 2006

Preface

The New Zealand Institute of Economic Research (NZIER) is a specialist consulting firm that uses applied economic research and analysis to provide a wide range of strategic advice to clients in the public and private sectors, throughout New Zealand and Australia, and further afield.

NZIER is also known for its long-established *Quarterly Survey of Business Opinion* and *Quarterly Predictions*.

Our aim is to be the premier centre of applied economic research in New Zealand. We pride ourselves on our reputation for independence and delivering quality analysis in the right form, and at the right time, for our clients. We ensure quality through teamwork on individual projects, critical review at internal seminars, and by peer review at various stages through a project by a senior staff member otherwise not involved in the project.

NZIER was established in 1958.

Authorship

This report has been prepared at NZIER by Johannah Branson and Brent Layton.

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1. Purpose

Reconciliation of downstream gas quantities is essential to effective operation of the gas market. Industry participants need to know how much gas is entering the system, how much gas is being extracted from the system by which participants and how much gas remains unaccounted for.

Current reconciliation practices have been found to be suboptimal and in need of improvement to meet Government policy objectives and to enhance industry outcomes. The Gas Industry Company (Gas Industry Co.) has developed and analysed a number of options for overcoming the problems and deficiencies of current reconciliation practices, on which the present discussion paper seeks feedback from stakeholders.

Before the Gas Industry Co. makes a recommendation to the Minister of Energy to regulate or make rules, the Gas Act 1992 (s 43N) requires it to:

> *(a) seek to identify all reasonably practicable options for achieving the objective of the regulation; and*
>
> *(b) assess those options by considering –*
>
> > *(i)* ***the benefits and costs of each option****; and [emphasis added]*
> >
> > *(ii) the extent to which the objective would be promoted or achieved by each option; and*
> >
> > *(iii) any other matters that the industry body or the Commission considers relevant; and*
>
> *(c) ensure that the objective of the regulation is unlikely to be satisfactorily achieved by any reasonably practicable means other than the making of the regulation…*

The Gas Industry Co. commissioned NZIER to scope the framework for analysing the benefits and costs of the identified reasonably practicable options for improving reconciliation practices. This report outlines this framework and seeks stakeholder input on identifying benefits and costs and determining their magnitudes.

2. Proposals for improving reconciliation practices

The objective of the Gas Industry Co.'s review of current reconciliation practices is:

> *to recommend to the Minister by June 2007 arrangements for more efficient and accurate downstream allocation and reconciliation of gas quantities. Such arrangements should:*
>
> - *ensure the protocols and standards for reconciling and balancing downstream gas; and providing and disclosing of data and information are safe, efficient, fair, and reliable;*
> - *standardise data exchange protocols across the industry and ensure the correct data is communicated to all affected parties in a timely manner;*
> - *provide for consistent, transparent, and enforceable processes;*
> - *facilitate retail competition and ensure barriers to competition are minimised;*
> - *establish more transparency of the full costs of balancing and reconciling gas; and*
> - *provide for more accurate identification and fairer allocation of the amount of unaccounted for gas.*

2.1 Problem areas

The Gas Industry Co. has identified five problem areas of current reconciliation practices:

- information quality
- allocation methodologies and unaccounted for gas (UFG)
- appointment of allocation agent
- governance
- audits and compliance.

2.2 Proposals

For the purpose of the cost-benefit analysis (CBA), the reasonably practicable options in each of these areas, under either a regulatory regime or pan-industry agreement, can be summarised as:

- Information quality:
  - Inputs into allocation process:

- develop and require compliance with standard file formats, and review periodically
- introduce estimation accuracy criteria, requiring initial allocation data to be within +/- two per cent of the final allocation data
- provide for submission of normalised data for groups 3 to 6 for each calendar month
- require 95 per cent of each retailer's group 5 and 6 meters at each gas gate to be read within each gas year quarter and 100 per cent within each gas year
- require retailers to comply with New Zealand Standard 5259:2004 for metering devices
- require loss factors to be updated annually on a per gas gate basis
- require calculation and publication of updated loss factors

– Quality and reliability of allocation information:

- retain the current timelines for monthly allocation, but excuse the allocation agent from any failure to deliver allocations on time provided the agent used best endeavours
- include exemption and transitional provisions to cover any issues faced by industry participants complying with the arrangements prior to the central registry go-live date
- require all industry participants to submit accurate data to the allocation agent and comply with all applicable data submission requirements

– Revisions and corrections:

- introduce rolling revision-up periods – four month interim allocation and 13 month final allocation, with no materiality threshold
- require all industry participants to submit revised data for both the interim and final allocations
- require that data submitted for the 13 month final allocation include actual data or 100 per cent historic estimated/normalised data
- remove current ad hoc correction process but retain ability for allocation agent to correct allocation information within one working day of its publication if a material error is discovered

– Transparency:

- require daily publication of daily gas gate metered quantities
- require publication of UFG (initial, interim and final) on a per gas gate basis
- require publication on a per gas gate basis of total aggregated monthly gas allocated to each retailer (initial, interim and final)

- Allocation methodologies and UFG:
  – mandate use of the one month UFG global method of allocation, in place of the difference methodology

  - make Day End Estimated Information Service and Month End Monthly Energy Allocation Service optional

- Appointment of allocation agent:
  - the Gas Industry Co. appoints a downstream allocation agent, under a service provider model, by tender, for a five year term

- Governance:
  - establish clear governance structures, under either a regulatory regime or pan-industry agreement, with the Gas Industry Co. as the governing body and administrator, funded by retailers according to number of installation control points

- Audits and compliance:
  - Audits:
    - the Gas Industry Co. appoints an independent auditor
    - the Gas Industry Co. sets the frequency and terms of standard audits, with the audit cost charged to the audited industry participant
    - the Gas Industry Co. may require ad hoc audits where considered necessary, including at the request of other industry participants; the audit cost is charged to the participant(s) at fault if material non-performance is found, otherwise apportioned between relevant participants at the discretion of the Gas Industry Co.
  - Compliance:
    - no monitoring and surveillance functions
    - reporting of breaches – mandatory by allocation agent, right to report by Gas Industry Co., voluntary reporting by industry participants and non-participants
    - establish notification, investigation, determination and appeal processes
    - the Gas Industry Co. appoints a market administrator, investigators and rulings panel, approves industry experts sought by rulings panel, manages performance of appointed bodies, publishes settlements and decisions
    - industry participants fund compliance costs
  - Special allocations:
    - the Gas Industry Co. may perform special allocations in particular circumstances.

3. CBA framework

3.1 Time period

The proposals for improving reconciliation practices would take effect, at the earliest, from 1 October 2008 under a regulatory regime and 1 October 2009 under a pan-industry agreement. We propose that the CBA cover a time period of five years from 1 October 2008 (i.e. 2008/09 to 2012/13 inclusive), with allowance to be made for any material net benefits arising beyond the five years.

CBA Q1: Is the first five years from the earliest date of the proposals taking effect a long enough time period to capture the resulting changes, particularly the benefits? If not, what period do you propose?

3.2 Baseline scenario

Before seeking to identify and, to the extent feasible and useful, quantify the costs and benefits of the above proposals, we need to establish the baseline scenario for the CBA. This represents the counterfactual and reflects the conditions that would eventuate over the period 2008/09 to 2012/13 in the absence of either a regulatory regime or pan-industry agreement, relative to which to assess the proposals' effects.

In this case, the baseline is no intervention by the Gas Industry Co. (including no active role in brokering a pan-industry agreement) to overcome the problems and deficiencies of current reconciliation practices, leaving any amelioration efforts to industry participants to pursue by negotiation and agreement.

In the five problems areas identified, we assume conditions under the baseline scenario to be:

- information quality – no significant improvement (still no standardised file formats, no greater accuracy of estimates, data normalising still ad hoc, meter reading requirements still undetermined for allocation groups 5 and 6 (beyond EGCC requirements for four readings per year), no publication of key data, still numerous uncertainties through continuation of confidentiality, no improvement in confidence, no reduction in UFG)
- allocation methodologies and UFG – many gates would still be using the difference methodology, although we assume an increase over time in the number of gates using the global methodology from five per cent currently to between 25 and 50 per cent by October 2013
- appointment of allocation agent – the allocation agent process may become easier, with action by industry participants due to their frustration with the current appointment process

- governance – no significant improvement (no effective governance procedures from industry negotiations)
- audits and compliance – no significant improvement (no effective means of achieving compliance or implementing settlements)

Overall, there would remain a lack of confidence in reconciliation, which would undermine competition and see industry participants continuing to waste resources in seeking to clarify allocation. There would be no real improvement in the certainty of accurate allocation, resulting in the persistence of unfair UFG allocation. High or uncertain UFGs would continue to have a negative effect on competition and to add to retailers' overhead costs.

We will refine the definition of the baseline scenario according to any further developments (e.g. implementation of switching and registry arrangements).

CBA Q2: Is this baseline scenario a realistic representation of what would happen in the absence of the proposals? If not, in what ways do you think it could be made more realistic and why?

3.3 Combination of options

A number of the options in the proposals could be adopted independently of each other. The costs and benefits of some options depend on which other options are also adopted. Given the number of options in the proposals, there are a large number of possible combinations. To assess the costs and benefits of each possible combination relative to the baseline scenario would be a major exercise and expense, likely exceeding the value of this analysis in informing decisions on the proposals.

It is therefore proposed that costs and benefits be assessed for adopting all of the proposals' options, under each of a regulatory regime and a pan-industry agreement, relative to the alternative of the baseline scenario. As far as practicable, the costs and benefits will be specified by each of the five subgroups of options – information quality, allocation methodologies and UFG, appointment of allocation agent, governance, and audit and compliance.

CBA Q3: Do you agree with assessing the costs and benefits of all of the proposals' options, under each of a regulatory regime and a pan-industry agreement, to simplify and reduce the costs of undertaking the CBA? If not, what alternative approach do you suggest and why?

4. Costs

The types of costs likely to be incurred by the proposals are summarised in Table 1.

Table 1 Costs of proposals for improving reconciliation

Option	Types of costs
Information quality	
Inputs into allocation process	Standard file format development and review costs Increased meter installation and reading costs, if any Costs of checking meters comply with standard, if any Increased allocation and loss factor calculation costs, if any Loss factor calculation and publication costs
Quality and reliability of allocation information	Costs of providing required data Increased reconciliation costs
Revisions and corrections	
Transparency	Data collection and publication costs
Allocation methodologies and UFG	
Global method of allocation	Costs of transition from difference method Establishment costs Administration costs
Optional allocation services	
Appointment of allocation agent	
Appointment of allocation agent	Costs of tender selection process Costs of monitoring performance of allocation agent
Governance	
Clear, transparent, mandatory governance structures	Establishment costs Administration costs
Audits and compliance	
Audits	Establishment costs Administration costs Audit costs
Compliance	Administration costs Enforcement action costs
Special allocations	Establishment costs Administration costs
Additional costs	
Regulatory regime	Costs of developing regulations/rules Drafting costs Implementation and establishment costs
Pan-industry agreement	Costs of negotiating and drafting agreement Costs of seeking approvals (e.g. Commerce Act) Implementation and establishment costs

Source: NZIER

CBA Q4: Are there any costs identified in Table 1 that you consider it inappropriate to include in the CBA? Are there any significant costs missing from Table 1? Do you have any suggestions as to the likely magnitudes of the costs or how they might, in practice, be estimated?

CBA Q5: Is there any relevant information on electricity market reconciliation that could be used to inform the cost estimates?

5. Benefits

The types of benefits likely to result from the proposals are summarised in Table 2.

Table 2 Benefits of proposals for improving reconciliation

Option	Types of benefits
Information quality	
Inputs into allocation process	Reduction in operational costs Reduction in search, negotiation and agreement costs Increase in retailer competition leading to greater productive, allocative and dynamic efficiency
Quality and reliability of allocation information	
Revisions and corrections	
Transparency	
Allocation methodologies and UFG	
Global method of allocation	Reduction in operational costs Reduction in search, negotiation and agreement costs Increase in retailer competition leading to greater productive, allocative and dynamic efficiency
Optional allocation services	
Appointment of allocation agent	
Appointment of allocation agent	Reduction in search, negotiation, agreement and enforcement costs
Governance	
Clear, transparent, mandatory governance structures	Reduction in search, negotiation and agreement costs
Audits and compliance	
Audits	Reduction in negotiation, argument, litigation and dispute resolution costs
Compliance	
Special allocations	
Additional benefits	
Regulatory regime	Ongoing ability to meet industry aims at less cost than pan-industry agreement (e.g. likely ability to spread governance and compliance arrangements over multiple workstreams, such as switching and reconciliation) Faster implementation than pan-industry agreement
Pan-industry agreement	Nil

Source: NZIER

CBA Q6: Are there any benefits identified in Table 2 that you consider it inappropriate to include in the CBA? Are there any significant benefits missing from Table 2? Do you have any suggestions as to the likely magnitudes of the benefits or how they might, in practice, be estimated?

CBA Q7: Do you agree that negotiation and agreement would cost less under the regulatory regime and be less likely to involve inefficient compromises? If not, why not?

6. Calculation approach

As is standard practice in CBA, the quantifiable costs and benefits will be combined into an estimate of net public benefit. In deriving this estimate, no value will be ascribed to wealth transfers between different parties (the gains to one party offset the loses to the other party, resulting in no net public benefit).

There are two perspectives that can be applied to determine the discount rate to be used to bring all future costs and benefits to their present values at a single point in time. The implementation of the Gas Industry Co.'s proposals can be thought of as a substitute for public policy action. From this perspective, the discount rate would be based on an estimate of the social rate of time preference. Alternatively, the proposals can be thought of as the collective action of a group of commercial industry participants, undertaken by the Gas Industry Co. as their agent. In this case, the discount rate is best thought of as a combination of the commercial participants' weighted average cost of capital (WACC). We propose using real discount rates of six per cent and 12 per cent to cover the range of values that the two perspectives would be likely to generate.

Many of the estimates of costs and benefits will be only approximate. Stakeholder input, in the framework outlined above, will be used to gain the best information available.

Sensitivity analysis will be conducted to ensure that the conclusions are reasonably robust and not dependent on one or a few uncertain estimates.

CBA Q8: Do you agree that wealth transfers should be disregarded in assessing the net public benefit of the proposals? If not, why not, and what alternative approach do you favour and why?

CBA Q9: Do you agree with the use of real discount rates of six percent and twelve percent? If not, why not, and what alternative values do you favour and why?

CBA Q10: Do you agree with the use of sensitivity analysis to test the robustness of the CBA's conclusions? If not, why not, and what alternative approach do you favour and why?