

Recommendation to the Minister of Energy on Arrangements for the Allocation and Reconciliation of Downstream Gas Quantities

March 2008





About the Gas Industry Co.

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:
 - o the operation of gas markets;
 - access to 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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Executive summary

Effective arrangements for the accurate allocation and reconciliation of gas quantities are a key component of an efficient gas market. Participants in the market need to know how much gas is going into the pipeline system, who is taking what gas out, how much gas is unaccounted-for, and how that unaccounted-for gas (UFG) will be allocated.

The purpose of this recommendation is to recommend rules to improve the allocation and reconciliation of downstream gas quantities (the 'Reconciliation rules'). 'Downstream allocation and 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.

The current industry arrangements for downstream allocation and reconciliation (through the industry agreed 'Reconciliation Code') have not been reviewed or amended since their inception in 2000. Gas Industry Co has identified a number of problems with the design of those arrangements, including especially a lack of specificity in the arrangements, a lack of proper governance and no workable means of enforcing compliance.

Improved arrangements, in the form of rules to be approved under the Gas Act, have been developed over the period since 2006 through the operation of an industry group (GART), and the release of two discussion papers, a Statement of Proposal, an Updated Proposal and most recently a further Industry Workshop. Through these mechanisms the issues have been extensively canvassed with the industry.

The proposed Reconciliation rules will:

- Implement a number of mandatory information quality measures;
- Provide for the appointment of a single downstream allocation agent by Gas Industry Co;
- Establish that the month end daily allocation service will be performed using a specified global methodology on all gas gates to ensure that gas quantities and UFG are more fairly and accurately allocated across all retailers;
- Provide for greater transparency through publication of a range of information, including UFG quantities;
- Mandate clear, transparent governance structures and related processes;
- Allow for the performance of audits and the establishment of a compliance regime; and
- Provide for the granting of exemptions by Gas Industry Co, where appropriate.

In particular, improved downstream allocation and reconciliation arrangements will ensure UFG is more equitability allocated to retailers, thereby enhancing the competitiveness of the retail market. Improved arrangements will also benefit consumers through a reduction in industry participants' operational costs and an increase in the potential for retail competition leading to greater productive, allocative and dynamic efficiency.

An effective compliance regime is crucial to ensuring that the proposed rules achieve their purpose. This recommendation is accompanied by a companion recommendation titled 'Recommendation to the Minister of Energy on Amendment to Gas Compliance Regulations' (the 'Compliance Recommendation').

Provided that the rules are approved within the forecast time frame indicated by MED, it is planned to have the implementation of the rules go live on 1 October 2008, to coincide with the start of the next gas year.

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Introduction

1.1 Background

For a number of years there has been general acceptance that the arrangements for allocation and reconciliation of downstream gas quantities in the Reconciliation Code are failing to deliver efficient outcomes. The current arrangements, as with other arrangements in the gas industry, depend on bilateral enforcement of terms in contracts with other industry players and industry codes. Compliance with industry codes and protocols has largely been poor, partly because of the muted incentives on the parties to enforce them through the courts.

1.2 Objectives

Recognising that the arrangements need improvement, the 2004 Government Policy Statement on Gas Governance ('2004 GPS') invites Gas Industry Co to recommend arrangements, including regulations and rules where appropriate, providing for effective industry arrangements:

- for the protocols and standards applying to wholesale gas trading, including balancing and reconciliation;
- for the establishment of consistent standards and protocols across distribution pipelines so that gas market participants can access distribution pipelines on reasonable terms and conditions; and
- for the establishment of gas flow measurement arrangements to enable effective control and management of gas.

Taking into account the policy objectives stated in the Act and the 2004 GPS, Gas Industry Co considers that the appropriate objective against which the reasonably practicable options should be assessed for the purposes of section 43N of the Gas Act is to recommend to the Minister 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 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 UFG;

together referred to as the 'regulatory objective'.

The 2004 GPS is in the process of being updated. A revised draft policy statement was released in December 2007¹ and submissions on that draft policy statement closed on 15 February 2008. In relation to downstream allocation and reconciliation, the policy aims in the draft policy statement are to:

"Establish and maintain effective and efficient arrangements for the allocation and reconciliation of downstream gas quantities."

The draft GPS refers to 'effective and efficient', whereas the regulatory objective Gas Industry Co has consulted on (based on the Gas Act and 2004 GPS) refers to 'efficient and accurate'. Gas Industry Co does not know whether the revised GPS will take effect prior to the Minister considering this recommendation. However, Gas Industry Co considers that the proposal is the best reasonably practicable option for delivering both 'effective and efficient' and 'efficient and accurate' downstream allocation and reconciliation.

A high level of compliance with the Reconciliation rules will help to achieve the benefits of the rules, including efficient allocation of UFG. The result should be more efficient, accurate and fair outcomes for retailers and consumers. For this reason Gas Industry Co is also making the Compliance Recommendation in conjunction with this recommendation.

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^{.1} http://www.med.govt.nz/templates/MultipageDocumentTOC____32813.aspx.

Analysis

2.1 Need for regulation

The current arrangements for allocation and reconciliation of downstream gas quantities are suboptimal, with allocations on some gas gates resulting in unfair and untenable outcomes. Improvements need to be made to increase market efficiency and competition. The analysis undertaken by Gas Industry Co has identified that the new arrangements must:

- be binding on all industry participants;
- implement a number of mandatory information quality measures;
- establish a prescribed methodology for the allocation of gas and UFG;
- allow for the appointment of a single downstream Allocation Agent by Gas Industry Co;
- mandate clear and transparent governance structures and related processes (e.g. amendment processes);
- allow for the provision of audits;
- establish a binding compliance regime; and
- provide (where appropriate) the ability for Gas Industry Co to perform special allocations.

In theory any mechanism that achieves mandatory participation could meet the above requirements – including a pan-industry agreement or a regulatory arrangement. However, Gas Industry Co's analysis has identified a number of factors that make a regulatory arrangement the most reasonably practicable solution, including:

- A regulatory arrangement can be implemented promptly (the proposal is for an implementation date of 1 October 2008).
- The cost-benefit analysis suggests that a regulatory arrangement has the greatest present value total net benefit.

- Although a pan-industry agreement could theoretically deliver the required outcomes, it is not
 clear that the industry would actually reach agreement on the proposed solutions. While
 considerable progress has been made towards consensus, certain aspects of the proposals are
 not universally agreed, with some industry players polarised in their views. Experience from
 both this industry and other utilities suggests that consensus will not be forthcoming.
- Before a pan-industry arrangement could be agreed or implemented, it is likely participants would need to seek an authorisation from the Commerce Commission. Gas Industry Co has not considered how likely it is that such an authorisation would be granted, but the potential need for authorisation adds delay and cost. Also, there is a further risk that the Commerce Commission could place conditions on the granting of an authorisation (if any).

Given the above factors, Gas Industry Co considers that the proposed regulatory arrangement is the most reasonably practicable option.

2.2 Work undertaken

Gas Allocation and Reconciliation Team

The Gas Allocation and Reconciliation Team (the 'GART') was established in 2006 to assist Gas Industry Co with the review of allocation and reconciliation arrangements in the New Zealand gas industry, both upstream and downstream. The GART helped identify a number of failures of the current industry arrangements and the team's work provided the basis for the June 2006 Paper.

June 2006 Discussion Paper

Gas Industry Co issued its first Discussion Paper - *Options for Amending Allocation and Reconciliation Arrangements in the New Zealand Gas Industry* - in June 2006 (the 'June 2006 Paper'). In that paper Gas Industry Co reviewed the current industry arrangements for both upstream and downstream gas allocation and reconciliation and identified a number of problems with all of those arrangements.

January 2007 Discussion Paper

In January 2007 Gas Industry Co released a second Discussion Paper - Reconciliation of Downstream Gas Quantities (the 'January 2007 Paper'). The January 2007 Paper presented further analysis undertaken by Gas Industry Co and took into account submissions received on the June 2006 Paper. Given the complexity of the processes involved, the paper proposed to focus the work stream programme on downstream arrangements while analysis was undertaken in other work streams in relation to a range of upstream issues. The January 2007 Paper included high-level frameworks of the cost benefit analysis and the potential scope of rules for downstream allocation and reconciliation.

Further technical analysis and the Maunsell Report

Following receipt of submissions on the January 2007 Paper, Gas Industry Co convened a number of technical meetings (including representatives from GART and other industry participants) to further refine technical aspects of the proposal. One contentious issue which was discussed at length at these meetings concerned the allocation of UFG to large industrial customers with time of use metering equipment ('TOU customers'). Given the level of industry disagreement, Gas Industry Co commissioned an independent paper from Maunsell Limited on this issue (see 'Allocation of Unaccounted For Gas' dated June 2007) (the 'Maunsell Report').

Cost-Benefit Analysis

Gas Industry Co also engaged the New Zealand Institute of Economic Research (NZIER) to carry out a cost-benefit analysis of the proposals (see 'Reconciliation of downstream gas quantities - Cost-benefit analysis' dated 11 May 2007) (the 'NZIER Report'). The cost-benefit analysis in the NZIER Report found that implementing the proposed improvements to downstream allocation and reconciliation arrangements through a regulatory regime would provide more present value total net benefits than implementing the proposed improvements through a pan-industry agreement (\$8.354 million present value total net benefit under a pan-industry agreement and \$10.792 million present value total net benefit under a regulatory regime).

Additional industry consultation

To assist Gas Industry Co further develop its proposal, Gas Industry Co circulated a work-in-progress draft of a Statement of Proposal, including draft rules, in July 2007 to each industry participant that had made a submission on the January 2007 Paper. On 9 August 2007, Gas Industry Co convened an industry workshop to discuss the proposals in the paper, including the draft rules. Industry feedback resulted in further refinement of Gas Industry Co's proposal.

Statement of Proposal

A Statement of Proposal – Allocation and Reconciliation of Downstream Gas Quantities (the 'Statement of Proposal'), incorporating all submissions received and analysis performed, was released for consultation in September 2007. The Statement of Proposal included a detailed statement of the proposed measures and the reasons for the proposal, an assessment of the reasonably practicable options and other information that Gas Industry Co considered relevant, including a copy of the cost-benefit analysis and a copy of the draft rules. Nine submissions were received on the Statement of Proposal. Issues raised in submission, and how they were dealt with, are discussed further below.

Updated Proposal

An *Updated Proposal for Industry Information – Allocation and Reconciliation of Downstream Gas Quantities* was released on 21 December 2007 (the 'Updated Proposal'). In response to submissions on the Statement of Proposal, the Updated Proposal informed industry participants of a number of proposed technical changes to the rules and included an updated version of the draft rules. The Updated Proposal invited participants to attend an industry workshop in February 2008 to discuss technical aspects of the rules (the 'Industry Workshop').

Industry Workshop

At the Industry Workshop, Gas Industry Co discussed with industry participants technical aspects of the draft rules. The discussions focused on the provisions relating to the calculation and application of profiles, but the opportunity was provided and taken to consider all of the rules. The workshop was well attended with eight industry participants represented. Technical changes made to the rules as a result of the Industry Workshop are outlined below.

Conclusion

There has been extensive consultation on Gas Industry Co's proposed solution. Industry submissions and feedback have been taken into account throughout the process. Industry participants are largely agreed that improvements to information quality, governance, compliance and the Allocation Agent appointment process are required.

One issue has been particularly contentious - the appropriate allocation of UFG to TOU customers. The views of some industry participants are polarised on this issue and retailers' views appear to be influenced by the nature of their customer composition. The lack of quality independent information has not assisted analysis of this issue. However, Gas Industry Co's proposed solution (which in essence applies, at a per gas gate level, an averaged UFG factor to TOU customers) is a workable process which it is considered will deliver the required policy objectives. The approach proposed during the two transitional years, of applying a cap and a floor to the allocation to TOU meters, is also a sensible and pragmatic compromise.

The conclusion reached by Gas Industry Co is that the best reasonably practicable option to achieve the regulatory objective of improving downstream reconciliation arrangements is to recommend the making of the Gas (Downstream Reconciliation) Rules under the Gas Act.

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Process to establish rules

3.1 Power to regulate

Specific power to regulate downstream reconciliation

Section 43F(2) of the Act currently provides that the Governor-General may, by Order in Council made on the recommendation of the Minister of Energy in accordance with sections 43I to 43P, make regulations:

- "(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:...

. . .

(c) prescribing reasonable terms and conditions for access to transmission or distribution pipelines: ..."

In order to reconcile and balance the quantities of gas purchased by retailers on the wholesale gas market, it is necessary to have processes for ascertaining the quantities that each of those retailers' customers have consumed downstream of the connection to the transmission system. For this reason Gas Industry Co considers that effective arrangements for allocation and reconciliation of downstream gas quantities come within the stated purposes in section 43F of the Gas Act.

The regulations refer to 'reconciling' gas. In the downstream gas industry in New Zealand the term 'reconciliation' is used to refer to the whole process of the allocation and reconciliation of gas quantities. In effect, this recommendation proposes that 'reconciliation' consist of a series of

'allocations' and a rolling annual 'reconciliation' (this is also consistent with the processes adopted in the Reconciliation Code).

Reconciliation processes are also required to allocate and reconcile upstream gas quantities. Those processes are currently provided through industry arrangements such as the Maui Pipeline Operating Code (MPOC) and Transmission Services Agreements. Those arrangements are under review through separate Gas Industry Co work streams.

Supplementary powers

Section 43S of the Act includes supplementary empowering provisions applying to any regulation or rule made under Subpart 1 of Part 4A of the Act (which includes rules or regulations for reconciliation arrangements). Those provisions include the ability for rules or regulations to:

- (a) "provide for 1 or more persons or bodies or groups of persons to carry out functions in relation to those regulations or rules, and for matters concerning their establishment, constitution, functions, members (including their appointment, removal, duties, and protection from liability), procedures, employees, administration and operation, funding by participants, and reporting requirements:
- (b) provide for systems, processes and procedures (including dispute resolution procedures), and the keeping, supply and disclosure of information, in relation to any matters specified in this subpart:
- (c) prescribe the form and manner in which information is to be disclosed:

. . . .

- (e) prescribe when and for how long information must be disclosed:
- (f) exempt or provide for exemptions (including provide for the revocation of exemptions), on any terms and conditions, of any person or class of persons from all or any of the requirements in regulations or rules made under this subpart:
- (g) provide for the supply of information for the purpose of administration and enforcement of this Act, and regulations and rules made under this Act:
- (h) provide for transitional provisions:
- (i) provide for any other matters contemplated by this Act or necessary for its administration or necessary for giving it full effect."

Conclusion

Gas Industry Co considers that the Act provides sufficient powers for the Minister to make the rules which are the subject of this recommendation.

3.2 Requirements when recommending rules or regulations

Section 43L - consultation

Section 43L(1) of the Act requires the body recommending gas governance regulations to the Minister to:

- undertake an assessment under section 43N of the Act; and
- consult with persons that the recommending body thinks are representative of the interests of persons likely to be substantially affected by the proposed regulations; and
- give those persons the opportunity to make submissions; and
- consider those submissions.

A summary of the consultation undertaken by Gas Industry Co is set out in section 6 of this recommendation.

Section 43N – identification and assessment of options

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

- "(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
 - (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 (for example, by education, information, or voluntary compliance); and
- (d) prepare a statement of the proposal for the purpose of consultation under section 43L(1)."

A summary of Gas Industry Co's identification and assessment of the options for downstream allocation and reconciliation arrangements is set out in section 5 of this recommendation.

Section 43N(2) - statement of proposal

Section 43N(2) requires that the statement of proposal referred to in section 43N(1)(d) must contain:

- a detailed statement of the proposal;
- a statement of the reasons for the proposal;
- an assessment of the reasonably practicable options, including the proposal, identified under subsection 43N(1); and
- other information that Gas Industry Co considers relevant.

A summary of the Statement of Proposal is set out in section 4 of this recommendation.

Conclusion

Gas Industry Co considers that it has complied with all of the requirements of sections 43L and 43N of the Act.

3.3 Rules or regulations

Under section 43Q of the Act, the Minister may make a rule for all or any of the purposes for which a gas governance regulation may be made. In deciding whether to make a rule rather than a regulation, the Minister must have regard to only:

- the importance of the rule, including whether the rule has a material effect on the rights and interests of individuals;
- the subject matter of the rule, including whether the rule contains detailed or technical matters rather than matters of general principle;
- the application of the rule, including:
 - whether the rule applies principally to a particular group (e.g., industry participants) rather than the general public;
 - whether the benefits of publication in accordance with section 43R of the Act rather than the Acts and Regulations Publications Act 1989 outweigh the costs of publication by that method; and
- the expertise and rule-making procedures of the recommending body.

Sections 43I to 43P continue to apply (with necessary modifications) as if the rule were a regulation. Section 43R applies to the method of making the rule:

- A rule may be made by the Minister publishing a notice in the Gazette that states:
 - the empowering provision for the gas governance regulation in relation to which the rule is made and a brief description of the nature of the rule;
 - where copies of the rule are available for inspection and purpose.
- A rule comes into force 28 days after the date on which it is notified in the Gazette or on any later date stated in the notice.
- The Minister and Gas Industry Co must make all rules made under section 43Q available to the
 public by making copies of them available for inspection free of charge at the head office of the
 Ministry and Gas Industry Co, on the internet in a printable form, and for purchase at a
 reasonable price.

Gas Industry Co has concluded that the downstream allocation and reconciliation arrangements should be implemented by way of rules under the Act as they primarily involve technical matters rather than matters of general principle and will only be binding on industry participants rather than the general public. The rules govern the limited domain of detailed and technical processes for allocating and reconciling downstream quantities of gas between retailers. The rules will also be accessible at no charge and at no cost on the websites of the Ministry of Economic Development and Gas Industry Co.

3.4 Publication of notice in Gazette

Gas Industry Co must, no later than 10 working days after it gives a recommendation to the Minister for a gas governance rule or regulation, publicise that recommendation and the assessment completed under section 43N. This recommendation will be made available on Gas Industry Co's website and notified in the Gazette for that purpose. A copy of the website and Gazette notices are set out in Appendices 4 and 5 respectively.

4

Statement of Proposal

The Statement of Proposal dated 4 September 2007 proposed the making of a recommendation to the Minister of Energy under the Act to approve rules governing downstream allocation and reconciliation arrangements. The Statement of Proposal proposed a regulatory solution to:

- Implement a number of mandatory information quality measures;
- Provide for the appointment of a single downstream Allocation Agent by Gas Industry Co;
- Establish that the month end daily allocation service will be performed using a specified global methodology on all gas gates to ensure that gas quantities and UFG are more fairly and accurately allocated across all retailers;
- Provide for greater transparency through publication of a range of information, including UFG quantities;
- Mandate clear, transparent governance structures and related processes;
- Allow for the performance of audits and the establishment of a compliance regime; and
- Provide for the granting of exemptions by Gas Industry Co, where appropriate.

The measures proposed in the Statement of Proposal have been amended by Gas Industry Co to take into account submissions on the Statement of Proposal, and minor technical aspects have been revised to take account of the results of the discussion of the Updated proposal at the Industry Workshop.

4.1 Summary of Proposed Measures

The proposed measures in the Statement of Proposal are summarised below. All of these measures are included in this recommendation.

Proposed measures to improve information quality

 Require all industry participants to submit accurate data to the Allocation Agent and comply with all applicable data submission requirements

- Require publication of daily gas gate metered quantities and publication of key UFG and allocation information (both for initial, interim and final allocations, and both on a per gas gate basis).
- Introduce rolling revisions: 4 month "interim allocation" and 13 month "final allocation" and require that data submitted for the final allocation include actual data or 100% historic estimated data. Also require annual reconciliation of allocated quantities against billing information.
- Develop and require compliance with standard file formats.
- Introduce estimation accuracy criteria, requiring initial allocation data to be within a certain percentage of the final allocation data.
- Provide for submission of normalised data for groups 3 to 6 for each calendar month.
- Not introduce a single methodology for forward-estimates or billing at this time, but maintain a watching brief in this area.
- Introduce minimum meter interrogation requirements and require compliance with certain aspects of NZS 5259:2004.
- Retain current timeframes for monthly initial allocations, but have extended timeframes for subsequent allocations to improve accuracy. Retain current allocation groups.

Proposed measures to improve allocation methodology

- Mandate the use of a modified global method of allocation and cease the use of the inefficient differencing method. Under this methodology, TOU customers are to be allocated an 'average UFG' rate (calculated on a per gas gate basis) with the remainder being allocated to allocation groups 3-6. Transitional arrangements will be in place for the first 2 years. It is envisaged there will be gas gates where it will be appropriate to exempt industry participants from the proposed methodology (for example those gas gates currently using a 1 month UFG global method).
- Only one of the three allocation services in the Reconciliation Code is used in practice, the other two services are not covered by the proposed regime.

Proposed process for appointment of Allocation Agent

 Require Gas Industry Co to appoint single downstream Allocation Agent. The rules specify key terms to be included in the "service provider" contract. Current appointment process (which relies on unanimous industry agreement) is inefficient.

Proposal to establish effective governance arrangements

- Proposal establishes Gas Industry Co as governing body and administrator. Gas Industry
 Co to oversee development of arrangements and make recommendations to the Minister
 of Energy. Rule changes to occur following Gas Act process.
- Arrangements to be funded by retailers by prescribed formula in the rules according to gas volumes.
- Rules allow Gas Industry Co to grant exemptions were appropriate.

Proposal to establish effective audit arrangements and means of compliance, including means of amending allocation results

- Gas Industry Co to appoint independent auditor(s) as required for regular and event audits. Proposed rules cover provision of information to auditor, responsibility for costs of audits, preparation of audit reports (including treatment of confidential information), use of audit reports and limit the period of time that an audit may cover.
- Accompanying this recommendation is a recommendation proposing amendments to the Compliance Regulations.
- Proposed rules allow for 'special allocations' to be performed by Allocation Agent in response to a direct request by Gas Industry Co. Proposed rules specify limits on the special allocations process.

5

Assessment

Section 43N of the Act requires that, before making a recommendation to the Minister, Gas Industry Co must assess:

- the costs and benefits of each reasonably practicable option, including the proposal; and
- the extent to which the regulatory objective would be promoted or achieved by each option; and
- any other matters which Gas Industry Co considers relevant.

5.1 Identification and assessment of reasonably practicable options

Gas Industry Co's analysis identified five key problem areas of the current downstream allocation and reconciliation arrangements:

- information quality;
- allocation methodologies and UFG;
- appointment of the allocation agent;
- governance; and
- audits and compliance.

In its review, Gas Industry Co considered the most reasonably practicable options in respect of each of the problem areas identified by it as summarised above.

Gas Industry Co engaged NZIER to assess the costs and benefits of the reasonably practicable options. One issue in respect of the analysis was determining the most appropriate level of abstraction at which to assess the reasonably practicable options. In its report, NZIER noted:

[The proposals] contain a number of options that could be adopted independently of each other. The costs and benefits of some of these options would depend on which other options are also adopted. Given the number of options in the

proposals, there are a large number of possible combinations, assessing all of which independently would be a major exercise. For simplicity, we therefore assess the costs and benefits of adopting all of the proposals' options as a single package...

There was general agreement from industry participants that it was appropriate to assess all of the potential options together as a package. Only Genesis queried this, noting that the analysis could more appropriately look at 'policy packages'.

Given the interconnectedness of the issues, Gas Industry Co considers it appropriate to consider the proposals as a whole. Furthermore, even though it is possible to argue that the costs and benefits might be different if Gas Industry Co had adopted a different option within the package, in most cases such a change would likely involve a transfer of wealth between industry participants which would have a minimal impact on the overall costs and benefits of the package as a whole.

The potential mechanisms for delivering the new reconciliation arrangements were assessed and short-listed to two candidates – a pan-industry agreement and a regulatory regime.

A summary of results is set out in the following table:

Options	Analysis
Status Quo	Does not achieve objective – and accordingly was not considered further in NZIER's cost benefit analysis.
New reconciliation arrangements implemented through pan-industry	Theoretically capable of achieving the regulatory objective.
agreement (taking effect from 1 October 2009 at the earliest)	Some doubt over likelihood of industry agreement and ongoing workability of arrangements
	Governance arrangements slightly more complicated than regulatory regime
New reconciliation arrangements	Achieves regulatory objective.
implemented through a regulatory	Reduces inefficiency of processes.
regime (taking effect from 1 October 2008)	Removes barriers to competition.

The detailed results of Gas Industry Co's assessment of the extent to which each of the options achieves the regulatory objective are set out in Appendix 1.

Having considered all the submissions, Gas Industry Co concluded that the best reasonably practicable option to achieve the regulatory objective was to develop rules to govern downstream allocation and reconciliation arrangements that incorporate all of the matters summarised in 5.1 above.

5.2 Cost benefit analysis

As noted above, Gas Industry Co engaged NZIER to perform an assessment of the costs and benefits of the proposals.

NZIER first prepared a framework for their analysis, which was attached to the January 2007 Paper. This framework allowed industry participants to provide feedback on the high level design of NZIER's approach (including the proposed discount rate, timeframes for the assessment and whether the correct costs and benefits were identified).

Feedback from industry participants agreed that continuation of the status quo would not achieve the regulatory objective and, accordingly, this 'option' was not considered by NZIER in their full cost benefit analysis. Only Genesis expressed concern that the analysis dismissed non-intervention as the baseline.

Accordingly, the analysis performed by NZIER assessed the relative costs and benefits of the regulatory regime or pan-industry agreement approach. A copy of the final cost benefit analysis is included as Appendix 4 to the Statement of Proposal.

NZIER's analysis modelled costs and benefits over the first ten years of the new arrangements being in force, with the addition of initial development and establishment costs. It was assumed the new reconciliation arrangements would take effect, at the earliest, from 1 October 2009 under a pan-industry agreement and 1 October 2008 under a regulatory regime. Thus NZIER assumed the benefits of improving reconciliation arrangements commenced one year later under a pan-industry agreement.²

The principal benefits of the proposal will be more efficient and accurate allocation of UFG, with an associated benefit of improving outcomes for consumers and increasing the potential for retail competition.

As technical losses on gas distribution networks are negligible (probably less than 0.1%), UFG is to some extent a measure of the effectiveness and accuracy of retailers' and distributors' systems. The proposed measures will increase transparency regarding the quality of those systems and allow more accurate calculation of gas delivered to end-users and UFG. A further benefit will be the consequential system improvements that occur as UFG problems are identified and rectified.

Some retailers (particularly those retailers who carry the burden of excessive UFG under the current voluntary arrangements – the so called 'incumbents') have been contributing considerable resources towards trying to ascertain and address the causes of UFG at gas gates with untenably high levels of UFG. Despite the resource being applied, little improvement has been made, often

² The 1 October 2009 date is now unrealistic. It is now expected that implementation of a pan-industry agreement would not be feasible until 1 October 2010 at the earliest. This means that the relative benefits of the regulatory solution are probably understated by the NZIER analysis.

due to a lack of industry buy-in. The proposals will see a reduction in these negotiation and search costs and the mandatory governance arrangements will ensure that appropriate levels of industry involvement will be applied in future towards the resolution of untenable UFG levels.

NZIER grouped the benefits of the proposed arrangements into the following three categories - UFG benefits; dispute benefits; and competition benefits. The costs of the proposed arrangements were grouped into four categories - development costs; establishment costs; administration costs; and operational costs.

Establishment costs will differ according to whether improved reconciliation arrangements are implemented through a pan-industry agreement or a regulatory regime. By contrast, the development, administration and operational costs of the new arrangements will largely be the same under either a pan-industry agreement or regulatory regime approach.

It was also assumed that the new arrangements will require amendment every five years. The costs of developing and establishing these amendments each time, whether under a pan-industry agreement or a regulatory regime, was assumed to average one quarter of the initial establishment costs.

The annual net benefits of the new proposed reconciliation arrangements were presented by NZIER as follows:

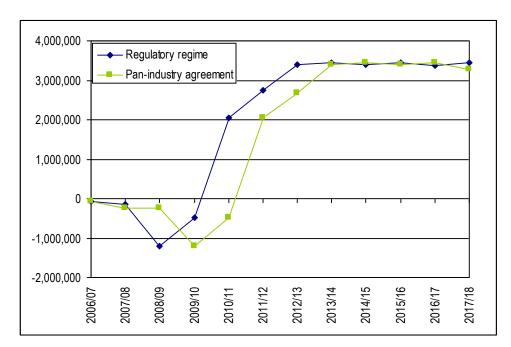


Figure 1 Annual net benefits

Source: NZIER

With discounting to reflect their relative timing, the above costs and benefits imply, over the period 2006/07 to 2017/18 present value total net benefits of:

- \$8.354 million under a pan-industry agreement (\$12.286 million present value total benefit less \$3.933 million present value total cost).
- \$10.792 million under a regulatory regime (\$14.769 million present value total benefit less \$3.977 million present value total cost).

A regulatory regime is therefore expected to provide \$2.439 million more in net benefits than a pan-industry agreement over this time period. The largest cost component is operational costs, at 81 per cent of present value total costs under a pan-industry agreement and 89 per cent under a regulatory regime.

Present value total benefits are dominated by competition benefits, at 99 per cent under each of a pan-industry agreement and a regulatory regime.

The sensitivity of these results to the cost and benefit coefficients was considered. Present value net benefits are most sensitive to the magnitudes of the operational costs and competition benefits adopted. In all cases, however, net benefits remain positive under both a pan-industry agreement and a regulatory regime, and significantly higher under a regulatory regime. This remains so even if operational costs or competition benefits are half the size modelled.

Since commissioning the cost benefit analysis some changes have been made to the proposal, in particular to the methodology by which UFG is allocated. Gas Industry Co has considered whether those changes (and, in particular, the proposal to adopt the averaged one month global UFG allocation to TOU customers, as opposed to the 1 month UFG global approach) would change the outcome of the cost benefit analysis. Gas Industry Co does not consider that any of the changes (including the adoption of the different UFG allocation model) would change the outcome of the cost benefit analysis – if anything it would only result in a wealth transfer between different industry participants.

Gas Industry Co does not consider that there are any other matters relevant to its assessment of the reasonably practicable options.

5.3 Conclusion

Having concluded the process outlined above, Gas Industry Co believes that:

• the status quo option does not meet the regulatory objective and is not a reasonably practicable option;

• the pan industry agreement, whilst it might meet the regulatory objective, will incur greater costs than a regulatory arrangement due to the need for industry agreement and possible authorisation or clearance from the Commerce Commission, and take longer for benefits to accrue due to delayed implementation.

Therefore, Gas Industry Co has concluded that the reasonably practicable option which best meets the regulatory objective is to develop rules or regulations to govern downstream allocation and reconciliation.

6 Consultation

Section 43L of the Act requires Gas Industry Co to:

- consult with persons that Gas Industry Co thinks are representative of the interests of persons likely to be substantially affected by the proposal;
- give those persons the opportunity to make submissions; and
- consider those submissions.

Submissions were sought from all of the persons listed in Appendix 2. Submissions on the Statement of Proposal paper were received from nine industry participants:

- Contact Energy;
- E-Gas;
- Energy Direct NZ (formerly Wanganui Gas);
- GasNet;
- Genesis Energy;
- Nova Gas;
- PowerCo;
- Tom Tetenburg and Associates; and
- Vector.

In general, the submissions demonstrated that there is strong support for improvements to be made in this area, but some continuing disagreement regarding the mechanics of the most appropriate allocation methodology and disagreement in relation to some detailed technical matters.

A number of key issues and areas of stakeholder disagreement emerged from the submissions on the Statement of Proposal paper. Those issues, and the conclusions reached by Gas Industry Co in respect of each of them, are summarised below. On many of these issues, fuller explanation of Gas Industry Co's reasons for its approach is presented in the Updated Proposal paper. The summary also includes minor additional changes made as a result of the Industry Workshop.

6.1 Key issues and responses from submissions on the Statement of Proposal, including feedback received at the Industry Workshop

In progressing the development of the rules and in responding to stakeholder submission, Gas Industry Co has been mindful of the equivalent electricity regime which is already in place. Many of the proposed rules are loosely based on equivalents in the electricity rules. This is appropriate. Many industry participants operate in both the gas and electricity markets and it is helpful if operationally there are similarities between the gas and electricity reconciliation regimes. However, there are also key differences between the two fuels. Key differences include high technical losses on electricity networks, that electricity use is instantaneous and that wholesale electricity prices are more variable.

Gas Industry Co considers the proposed measures take sensible account of the electricity precedents while they are also appropriately tailored for the New Zealand gas industry.

Dealing with the transition to the 'go-live' date for the gas registry

At this stage, Gas Industry Co is working towards a go-live date of 1 October 2008 for the Reconciliation rules. However, because of delays in Ministerial approval of the Gas (Switching) Rules 2008 (the 'Switching Rules'), the gas registry will now not be operational until March 2009. At the time that the Statement of Proposal was released, the draft Reconciliation Rules assumed that the gas registry would become operational at the same time as those rules. However, as the delay in implementation of the gas registry was communicated to industry participants during the submissions period, a number of submissions commented on this issue.

Three submissions favoured changing the go-live date for the Reconciliation Rules, one favoured changing the transitional arrangements and others (including from some retailers which are likely to be most affected) were silent.

Having taken the submissions into account, Gas Industry Co's preferred approach is to retain the 1 October 2008 date and include a number of transitional provisions to allow for the gas registry not being operational until 1 March 2009. This approach was set out in the Updated Proposal and the rationale explained, particularly the desirability of getting the improvements in place as soon as possible and the administrative advantages of commencing at the start of a gas year. There was no suggestion at the Industry Workshop that this should be changed.

Dealing with the allocation of gas between TOU and non-TOU customers, especially during the transitional period

An issue discussed intensively throughout 2007 was that of managing the allocation of gas between TOU and non-TOU customers. This is both a technical and commercial issue and submissions tend to be polarised depending on the makeup of the retailer's customer base. Analysis of this issue has been particularly difficult due to the lack of high quality information and the inability to accurately predict if and, if so, how UFG levels will change following the introduction of the draft rules.

Based on the submissions, Gas Industry Co considers that there is no strong evidence that TOU meters contribute less on average to UFG than non-TOU meters and that, in the long-term, there is most merit in continuing to allocate a more stable level of UFG to TOU customers. This approach is not supported by all stakeholders.

Given the problems with information quality, the Statement of Proposal proposed applying a national average rate of UFG during an initial transitional period. Three submissions suggested that, despite the information uncertainties, a per gas gate approach during the transitional period was preferred to the national average approach.

The draft rules thus adopt a per gas gate UFG factor for use in the transitional period, with a national average only to be applied if gas gate data is not available (for example, on gas gates that are not shared and not covered by the Reconciliation Code). The per gas gate transitional UFG factor will have a cap and floor applied to it (a factor of 1.035 and 0.985) to limit 'rate-shock' in UFG allocations to either TOU or non-TOU customers. Where the proposed approach is inequitable (for example, where there is one large TOU customer and a very small number of non-TOU customers at a particular gas gate) the transitional exemption provisions in the rules provide a means to apply a fairer allocation.

The approach described above was set out and fully explained in the Updated Proposal. There were no adverse comments on the proposed approach at the Industry Workshop.

Exemptions from the rules

Although submissions generally supported the need for exemptions, there were strong calls for more details on the process and a better assurance that exemptions would be applied in a way that did not unfairly advantage individual parties.

In response to industry submissions, the process requirements in the rules have been expanded. For example, the updated rules now require that Gas Industry Co may only grant an exemption following consultation with substantially affected persons and if satisfied the granting of an exemption will better achieve the purposes of the Reconciliation rules. Once the rules are made by

the Minister, Gas Industry Co also expects to develop operating guidelines on how the exemptions process will operate.

The expanded process was set out and fully explained in the Updated Proposal. There were no adverse comments on the approach proposed at the Industry Workshop.

Status of metering standard NZS 5249

The rules include some references to the 2004 version of NZS 5259 which is the standard for gas measurement and metering. Submitters were generally concerned about this as they are only required to comply with the 1997 version of the standard under the Gas Regulations 1993.

Gas Industry Co considers the concerns about regulatory inconsistency are overstated as the rules only apply certain specific obligations in the standard. In addition, the MED recently released a consultation paper in which it proposes to amend the Gas Regulations to refer to the 2004 standard. Accordingly, the reference to the 2004 standard is retained in the proposed rules.

Submitters were also concerned about regulatory duplication, arguing that as participants are already required to comply with the standard in the Gas Regulations it is not necessary to include it in the Reconciliation rules. However others, such as Contact, recognised that compliance with the standard is crucial to the effective operation of the rules and it was therefore important for it to be included in them so that compliance could be enforced through the compliance regime.

Introduction of standardised billing methodology

While there has been persistent support from some industry participants for the rules to mandate the introduction of a standardised billing and estimation methodology, other retailers are opposed to it. The proposed rules do not include this requirement. Although a standardised methodology has attractions, it potentially adds large compliance costs and its development would be a major distraction to the implementation of the core reconciliation proposal. Gas Industry Co has decided to set aside this issue for future consideration.

Funding options and allocation of costs

The draft rules require retailers to fund ongoing allocation costs under a dedicated funding process set out in the rules, rather than through the annual levy process specified in the Gas Act for the funding of Gas Industry Co. There was broad support for this.

In relation to allocation of costs, the draft rules in the Statement of Proposal allocated costs to retailers based on allocated volumes. As with submissions on previous consultation papers (including the January 2007 Paper that proposed a different approach), submissions on this were mixed. Three submissions on the Statement of Proposal supported the volume-based approach,

three supported cost allocation based on customer numbers, and two provided alternative approaches. In particular, submitters with large numbers of TOU customers opposed the volume-based approach.

The submission from the current allocation agent supported the funding by volume proposal. Further, informal discussions with him indicate that a substantial proportion of time is spent tracking and checking TOU information to ensure that consumption from TOU customers is correctly recorded and reported.

Accordingly, Gas Industry Co has taken the submissions into account but has decided to continue with the proposal to allocate costs based on gas volumes.

Cost benefit analysis of rules compared to pan-industry agreement

There were no submissions strongly opposed to NZIER's cost benefit analysis. Some submissions suggested that the potential for a pan-industry agreement should be further investigated by Gas Industry Co, or that certain costs did not reflect actual costs (although detailed information was not provided to substantiate these claims). However, none of the submissions challenged the primary finding that there was net benefit in implementing new reconciliation arrangements. Further analysis by Gas Industry Co has also indicated that the net advantage of the rules over a pan-industry agreement has, if anything, strengthened as a result of the delay in the gas registry.

For the reasons discussed elsewhere in this paper, Gas Industry Co's view is that a regulatory arrangement is the reasonably practicable option that provides the most net present value benefit.

Need for further consultation

Three submissions on the Statement of Proposal specifically stated that a further round of consultation was required to better resolve technical issues. Extensive consultation has already occurred, starting with the GART in 2006, two discussion papers, the opportunity for feedback on the draft Statement of Proposal paper, and formal consultation on the Statement of Proposal. Since then, the Updated Proposal has been released to participants and opportunities for feedback provided both at the Industry Workshop and prior to this recommendation being submitted. Over this period of time, most options for dealing with issues have been canvassed.

There remains a small potential risk that a participant may challenge the rules based on a perceived lack of compliance with section 43L. Such a challenge would likely focus on the aspects of the proposal that have been amended since release of the Statement of Proposal.

Gas Industry Co considers the risk of a successful challenge to be low. In particular, Gas Industry Co considers that the changes made to some detailed aspects of the proposal since the Statement of Proposal was released were made in accordance with a proper consultation process. The

changes were made in response to the views of industry participants and MED, and generally relate to minor process and detail issues surrounding the application of the allocation and reconciliation rules, many of which have already been the subject of previous consultation. The approach taken by industry participants at the Industry Workshop was very productive and the general sense was one of approval for the initiative taken in holding the workshop. Subsequent to the workshop, Gas Industry Co provided industry participants with another opportunity to comment on the revised rules prior to this recommendation being finalised. In the circumstances, Gas Industry Co considers a further formal round of consultation is not required and that it has complied with its consultation obligations.

Allocation Agent process

Some submissions suggested that the draft rules in the Statement of Proposal did not sufficiently prescribe either the process for appointing the allocation agent or the process that the allocation agent must follow.

Gas Industry Co has made a number of changes to the draft rules attached to the Statement of Proposal in response to these submissions, in particular requiring that the allocation agent maintain a website for the purpose of publishing information, tightening the process in relation to corrections and requiring performance of allocations even in the event that participants fail to provide the required consumption information.

In relation to the appointment terms and process, Gas Industry Co considers it appropriate that the rules maintain some flexibility. However, to the extent practicable, Gas Industry Co confirms it will seek industry views on both the process and terms of the allocation agent's appointment.

The changes set out above were incorporated in the Updated Proposal and did occasion some discussion at the Industry Workshop. No change was made as a result.

Process for audits

A number of submissions commented on the draft audit arrangements, including the need for the process and scope of those arrangements to be bolstered. Gas Industry Co considers it appropriate for the *potential* scope of audits to be at the broad end of the spectrum. However, under the proposed rules, Gas Industry Co will take care to ensure that audits are appropriately scoped and that scope creep does not occur.

Timing issues in regard to allocation process

The current allocation agent's submission raised strong concerns that the proposed timing of the various processes was not workable, with a few other submissions also noting some timing concerns. Gas Industry Co reviewed all of the time frames in the rules and proposed a number of

changes. Streamlining the allocation timeframes should decrease the allocation agent's costs. The changes were circulated to industry participants in the Updated Proposal and discussed at the Industry Workshop. Minor changes were made as a result.

Protection of confidentiality

Some of the submissions did not consider that the draft rules attached to the Statement of Proposal went far enough to protect confidentiality. As a general principle, Gas Industry Co is in favour of improving information availability in this area. However, if the operation of the rules results in legitimate confidentiality concerns, this may be an area where an exemption is appropriate.

Reasonable endeavours to reduce UFG

A number of submissions noted that the draft rules attached to the Statement of Proposal did not include sufficient measures to incentivise the industry to improve UFG. In response to this, Gas Industry Co has included a general obligation on all industry participants to use reasonable endeavours to remedy the cause of UFG or reduce UFG occurring at a gas gate.

This approach was included in the Updated Proposal.

Application of seasonal adjustments for consumption information

The draft rules attached to the Statement of Proposal provided for the application of seasonally adjusted daily shape values to meter readings in preparing consumption information for submission to the allocation agent. However, the submissions from Contact and Genesis suggested that the provisions needed further technical refinements and clarification. In response to submissions, Gas Industry Co made some changes to the intended content of the seasonal adjusted daily shape values and the process of applying those values to meter readings.

The proposals for application of profiles and seasonal adjustments were also discussed at the Industry Workshop and the results of that discussion are set out separately below.

Amendments made as a result of the Industry Workshop

At the Industry Workshop agreement was reached with participants on substantive technical changes as follows. For convenience these changes include those made prior to the workshop (and available for discussion) but not included in the Updated Proposal:

• a provision has been included to address the lack of gas information needed to invoice for ongoing fees for the first two months after go-live, and drafting changes were made prior to the workshop to ensure consistency with feedback from the MED on the switching rules;

- Gas Industry Co is now required to formally consult with allocation participants prior to setting information exchange formats, and to give 3 months notice prior to implementation;
- changes have been made to allow retailers to forecast seasonal shape values or other
 methodologies for applying to historic estimates, but the entire consumption information
 submitted for an initial allocation (rather than just forward estimates) must now be accurate
 within the required percentage of error when compared to the consumption information
 submitted for a final allocation;
- the rules now provide for Gas Industry Co to develop guidelines on the methodology used by the allocation agent in determining whether or not to register a deemed profile submitted by a retailer, and to consider disputed determinations; and for the compulsory ongoing review of determinations;
- changes have been made so that the annual reconciliation of gas quantities and the report on the accuracy of initial consumption information is now carried out monthly by the allocation agent on a rolling previous 12 month basis; and
- changes have been made to the pre-registry transitional provisions to provide more time for the allocation agent to resolve disputes as to who is the responsible retailer for a consumer installation, and to give the allocation agent access to information from 'allocation participants' generally (rather than just 'distributors') to resolve disputes.

6.2 Conclusion

Gas Industry Co considers that it has complied with its obligations under section 43L of the Act. In addition to formal consultation on the Statement of Proposal, the process undertaken by Gas Industry Co has allowed extensive opportunity for industry comment, including the GART in 2006, two discussion papers, opportunity for feedback on a draft Statement of Proposal, including draft rules, the release of the Updated Proposal and numerous industry workshops.

Industry participants broadly support the need for a revised and mandatory downstream allocation and reconciliation regime. While particular issues remain contentious, there is strong industry consensus that sensible compromises need to be made. Gas Industry Co's view is that the draft rules represent a robust compromise and that the proposal overall is the reasonably practicable option that best meets the regulatory objective.

Potential Risks

The key risks with the proposal which have been identified by Gas Industry Co are:

- Challenge from an industry participant on the need for further consultation: As discussed above, changes have been made to the proposal since the release of the Statement of Proposal and there is some risk that an industry participant may challenge the decision to proceed to a final recommendation without a further round of formal consultation. Gas Industry Co's view is the risk is low and it is confident it has met its consultation obligations. Gas Industry Co also notes the very constructive industry reaction to the Industry Workshop and the minor amendments made to the rules.
- Delay affecting the proposed implementation date: The timeframe to achieve the go-live date of 1 October 2008 is tight. Unforeseen delays may jeopardise Gas Industry Co's ability to implement the proposal by the go-live date. If Gas Industry Co becomes aware that the go-live date is unachievable, it will seek urgent rule changes to allow an alternative date to be selected most probably to coincide with the go-live date for the registry or failing that the commencement of the next gas year. The changes that would be required and the timing of the associated processes, will be scoped as a part of implementation contingency planning.
- Difficulties in appointing the allocation agent and auditors: The appointment of an appropriate allocation agent may be problematic, particularly if the incumbent allocation agent decides not to pursue the role. Issues to be considered include the establishment of appropriate allocation systems and the management of allocations during the transitional period (for example, given the current lack of standardisation of the data submitted by industry participants). Industry participants have also suggested that existing relationships and the size of the New Zealand market may affect Gas Industry Co's ability to fill other key roles (such as the appointment of auditors). However, in relation to both the allocation agent and other roles, there are expected to be a sufficient depth of candidates able to be identified, including international companies, with relevant experience and Gas Industry Co is confident it will be able to implement the rules and appoint qualified, appropriate service providers.
- **Technical errors in the rules:** Despite the rules being provided to industry participants in several drafts, prior to both the Statement of Proposal and the Industry Workshop, there was limited engagement on the precise mechanics of the draft rules. There is a risk that technical

errors may be discovered in the rules following their approval. This risk will be mitigated primarily by using the transitional exemption provisions. Urgent rule changes to address any such technical errors will be made as a last resort only.

• 'Rate shock': There is some risk that changes to the allocation of UFG will result in an increase in the amount of UFG being charged to customers. Gas Industry Co understands that the potential for industry participants to directly pass on increases in UFG to customers is more acute in relation to large TOU customers. Pricing for mass market customers may also be affected but the precise impact is difficult to assess and will depend on each retailer's process for calculating mass market retail prices. For example, relevant factors will include whether retailers calculate their mass market customer charges on a per gas gate or a more regional basis (Gas Industry Co understands many retailers adopt a regional pricing approach), the level of gas volume 'margin' in retailers' take-or-pay contracts, and the impact of rectifying the unfair levels of UFG being allocated to some mass market customers through the current 'differencing' method of allocation.

The design of the proposal, and in particular the design of the transitional arrangements, is intended to mitigate any potential rate shock. This will be done in the first instance through the application of the cap and floor on allocations to TOU customers, but the transitional exemptions will be used to deal with any extraordinary circumstances.

• Significant short-term adverse financial impacts on some retailers: The proposal is likely to result in significant changes to UFG allocation at some gas gates, particularly those where UFG is large and there is a significant reduction in the amount of UFG being allocated to the previous 'incumbent' retailer. The transitional arrangements will help mitigate these adverse affects by capping the UFG allocation to TOU customers, such that the UFG factor will not go above 1.035 or below 0.985 for those customers.

In terms of the policy rationale, at some gas gates where the differencing method of allocation is being applied the bulk of UFG is being unfairly allocated to the incumbent retailer to the advantage of all the non-incumbent retailers at that gas gate. Where this is the case the financial impact of the draft rules on the non-incumbent retailers at such gas gates may have to be accepted as the first step towards correcting the current inequalities.

• Risks due to the lack of a central registry: As noted above, the proposal includes transitional arrangements to address the lack of a central registry on the go-live date. The central registry is to be established under the switching rules which come into effect on 13 March 2008 and is not expected to be operational until March 2009. The transitional arrangements in relation to the registry involve resolution by the allocation agent of disputes relating to customer installation data. One possible risk is a failure to satisfactorily resolve any such disputes. The impact of this risk will depend on the number of disputes that eventuate. However, even given

the above risk, the proposal represents a significant improvement on the status quo as there is currently no agreed process for the resolution of such disputes.

Gas Industry Co considers that these risks are not sufficient to detract from the overall benefits of the proposal. Also, the risks of not proceeding with the proposal need to be taken into account. Downstream allocation and reconciliation needs improvement. The proposals represent a significant improvement on the status quo and in meeting the Government's objectives for the gas industry.

8

Gas Act objectives and MED consultation

8.1 Consideration of Gas Act objectives

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

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

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

Section 43ZN of the Act sets out the other objectives which 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 to the long-term benefit of end-users;
- (iii) incentives for investment in gas processing facilities, transmission, distribution, energy efficiency and demand-side management 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; and

Paragraph 5 of the GPS adds that, consistent with the overall objective and the other objectives in the Act, the Government is seeking certain other specific outcomes which include:

- (b) Energy and other resources are used efficiently;
- (e) The full costs of producing and transporting gas are signalled to consumers;

- (g) The quality of gas services and in particular trade-offs between quality and price, as far as possible, reflect customers' preferences;
- (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."

Also, more specifically in relation to allocation and reconciliation, paragraph 9 of the 2004 GPS sets out the Government's expectation that Gas Industry Co will develop and submit to the Minister for approval proposed arrangements, including regulations and rules where appropriate, providing for effective industry arrangements in certain areas. In relation to reconciliation, Gas Industry Co is to develop and propose arrangements for:

• ...protocols and standards applying to wholesale gas trading, including quality standards, balancing and reconciliation.

. . .

- 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."

The specific downstream reconciliation objective is even more clearly presented in the draft 2008 GPS, as follows:

Establish and maintain effective and efficient arrangements for the allocation and reconciliation of downstream gas quantities.

In the Statement of Proposal, the objective of the proposal was stated to be to recommend arrangements for "more efficient and accurate downstream allocation and reconciliation of gas quantities". Further, that such arrangements should:

- ensure the protocols and standards for reconciling and balancing downstream gas, and providing and disclosing of data and information, are efficient, fair, and reliable;
- standardise data exchange protocols across the industry and ensure the correct data are 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 UFG

Gas Industry Co's detailed analysis of the proposal against the regulatory objective is set out in Appendix 1. This concludes that establishing the downstream allocation and reconciliation arrangements in accordance with this recommendation is the most reasonably practicable option for delivering the regulatory objective.

8.2 Consultation with MED

Representatives of the MED have been briefed regularly by Gas Industry Co on the development of both the downstream allocation and reconciliation arrangements and the compliance and enforcement arrangements. MED has been issued with all relevant documents in conjunction with the industry stakeholders identified in Appendix 2.

Detailed discussions occurred with MED in November 2007 and January 2008 and full account was taken of those discussions in preparing the proposals attached.

MED officials were provided with a copy of this recommendation prior to it being approved by the Gas Industry Co Board for release to the Minister. Comments from MED have been taken fully into account. Advice from the Energy and Communications Branch of MED is that they agree with the policy settings for downstream reconciliation, and are generally comfortable with the legal drafting for incorporating those policy settings into the recommended rules.

8.3 Communications

In accordance with section 43O of the Act, Gas Industry Co intends publishing, within 10 working days after giving it to the Minister, this recommendation and the assessment completed under section 43N in both the Gazette and on the Company's website.

The notice of recommendation to be published in the Gazette is attached as Appendix 3.

A draft of the notice to be published on Gas Industry Co's website is attached as Appendix 4.

Gas Industry Co also intends to notify all stakeholders of the fact that this recommendation has been made and that it is viewable on its website.

9

Recommendation

Gas Industry Co recommends to the Minister of Energy under sections 43F(2)(a), 43G, 43Q and 43S of the Gas Act 1992 the making of the Gas (Downstream Reconciliation) Rules 2008 in the form attached as Appendix 5 to this recommendation.

1 O Appendices

The following appendices are attached to this recommendation:

- Appendix 1: Assessment
- Appendix 2: List of stakeholders for consultation
- Appendix 3: Notice for Gazette
- Appendix 4: Notice for website
- Appendix 5: Rules

Appendix 1: Analysis of reasonably practicable options against the regulatory objective

Option 1 – Status Quo

Note: Gas Industry Co does not consider that continuation of the Status Quo is a reasonably practicable option as it fails to deliver the regulatory objective. However, analysis of the Status Quo is presented below for completeness.

Objective.	Objective requirement	Meets objective requirement?	How objective met/not met
Efficiency.	Protocols and standards for reconciling gas are efficient	No.	Lack of transparency/ too much confidentiality/ Irregular updating of loss factors/ Appointment of Allocation Agent problematic/ No transparent, workable, enforceable, mandatory governance arrangements
Efficiency.	Provides standardised data exchange protocols	No.	No standardised file formats or data requirements
Efficiency.	Ensures correct data is communicated to all affected parties in a timely manner.	No.	Inadequate timeframes/ wash-up timings inappropriate
Accuracy	Reconciliation produces accurate results.	No.	Inconsistent estimation methodologies/ Issues with frequency of meter reading/ lack of effective incentives to provide accurate information/ ad hoc corrections problematic
.Fair.	Protocols and standards for reconciling gas are fair/ equitable	.No.	UFG allocation untenable on some gates/ Lack of transparency
Fair	Provides accurate identification and fairer allocation of the amount of UFG.	No.	UFG allocation untenable on some gates/ Lack of transparency
Reliable	Protocols and standards for reconciling gas are reliable.	No.	No effective compliance/ not auditable/ inaccurate information.

Objective.	Objective requirement	Meets objective requirement?	How objective met/not met
Reliable.	Consistent, transparent, and enforceable processes	No.	No transparent, workable, enforceable, mandatory governance arrangements.
Reliable	Is auditable	No	No workable audit process in current arrangements
Reliable	Effective compliance regime.	No.	No effective mechanism that monitors and enforces compliance with the provisions in the Reconciliation Code and allocation agreements
Barriers to competition minimised/ Facilitates Retail Competition	Transparency around full costs of balancing and reconciling gas	No.	No transparency surrounding UFG and its allocation/ Lack of transparency
Barriers to competition minimised / Facilitates Retail Competition	Provides a reconciliation process, which does not create barriers to new entrant participants.	No.	Any new entrant would be faced with uncertainty surrounding reconciliation processes and the costs/obligations involved

Option 2 – Pan-industry agreement

Objective.	Objective requirement	Meets objective requirement?	How objective met/not met
.Efficiency.	Protocols and standards for reconciling gas are efficient	Yes	Introduction of transparent, workable, enforceable, mandatory governance arrangements/ standardised processes
Efficiency	Provides standardised data exchange protocols	Yes	Requirement to comply with any data exchange protocols developed by the industry and published by Gas Industry Co
Efficiency	Ensures correct data is communicated to all affected parties in a timely manner.	Yes	Processes to enable reconciliation are more clearly defined and timeframes for allocation are clear.
Accuracy.	Reconciliation produces accurate results	Yes	Historical Estimation methodologies defined and requirement for calculation of forward estimates (including requirement that initial submission be within 15% of final submission Meter reading obligations to ensure more accurate reconciliation data
Fair/Equitable	Protocols and standards for	.Yes.	Measures to ensure more

Objective	Objective requirement	Meets objective requirement?	How objective met/not met
	reconciling gas are fair/ equitable		accurate reconciliation data is submitted be in place which would ensure fair and correct allocation of gas quantities Methodology for allocating UFG defined
Fair/Equitable	Provides accurate identification and fairer allocation of the amount of UFG.	Yes	Methodology for allocating UFG defined UFG amounts published so more transparent
Reliable	Protocols and standards for reconciling gas are reliable	Yes	Measures to ensure more accurate reconciliation data is submitted be in place which would ensure fair and correct allocation of gas quantities Introduction of compliance processes
Reliable	Consistent, transparent, and enforceable processes	Partly.	Governance arrangements introduced – rely on cooperation of parties – not easily enforceable
Reliable	Is auditable	Partly.	Audit processes in place – rely on cooperation of parties – not easily enforceable
Reliable	Effective compliance regime.	Partly.	Monitoring and compliance regime set out – rely on cooperation of parties – not easily enforceable
Barriers to competition minimised/ Facilitates Retail Competition	Transparency around full costs of balancing and reconciling gas.	Yes	Processes defined and therefore more transparent UFG amounts published
Barriers to competition minimised / Facilitates Retail Competition	Provides a reconciliation process, which does not create barriers to new entrant participants	Yes	Development of robust reconciliation processes and availability of information mean that new entrants will have the necessary information required to enter the gas retail market

Option 3 – Regulatory arrangement

Objective	Objective requirement	Meets objective requirement?	How objective met/not met
Efficiency.	Protocols and standards for reconciling gas are efficient	Yes.	Introduction of transparent, workable, enforceable, mandatory governance arrangements/ standardised processes
Efficiency.	Provides standardised data exchange protocols	Yes.	Requirement to comply with any data exchange protocols developed by the industry and published by Gas Industry Co

Objective	Objective requirement	Meets objective requirement?	How objective met/not met
Efficiency	Ensures correct data is communicated to all affected parties in a timely manner.	Yes	Processes to enable reconciliation are more clearly defined and timeframes for allocation are clear.
Accuracy.	Reconciliation produces accurate results	Yes	Historical Estimation methodologies defined and requirement for calculation of forward estimates (including requirement that initial submission be within 15% of final submission Meter reading obligations to ensure more accurate reconciliation data
.Fair/Equitable	Protocols and standards for reconciling gas are fair/ equitable.	Yes	Measures to ensure more accurate reconciliation data is submitted be in place which would ensure fair and correct allocation of gas quantities Methodology for allocating UFG defined
Fair/Equitable	Provides accurate identification and fairer allocation of the amount of UFG	Yes	Methodology for allocating UFG defined UFG amounts published so more transparent
Reliable	Protocols and standards for reconciling gas are reliable	Yes	Measures to ensure more accurate reconciliation data is submitted be in place which would ensure fair and correct allocation of gas quantities Introduction of compliance processes
Reliable	Consistent, transparent, and enforceable processes.	Yes.	Governance arrangements introduced
Reliable	Is auditable.	Yes	Audit processes in place
Reliable	.Effective compliance regime.	.Yes.	Monitoring and compliance regime set out
Barriers to competition minimised/ Facilitates Retail Competition	Transparency around full costs of balancing and reconciling gas.	Yes	Processes defined and therefore more transparent UFG amounts published
Barriers to competition minimised / Facilitates Retail Competition	Provides a reconciliation process, which does not create barriers to new entrant participants	Yes	Development of robust reconciliation processes and availability of information mean that new entrants will have the necessary information required to enter the gas retail market

Appendix 2: List of stakeholders for consultation

Age Concern

AGL

Arete Limited

Auckland Gas Company Austral Pacific Energy Bay of Plenty Electricity

Bell Gully BRG

Bridge Petroleum Carter Holt Harvey

Castalia

Clifford Chance Law Office Commercial Chambers Commerce Commission Concept Consulting Consumers Institute Contact Energy Ltd Craftware Computing Ltd Degussa Peroxide Ltd

E-Gas

Electricity and Gas Complaints Commission

Electricity Commission Energy Direct NZ

Energy Efficiency and Conservation Authority

Energy Link Ltd

Exergi

Fletcher Building Ltd Four Winds Communication Gas Association of New Zealand

Gas Net Genesis Energy Greymouth Gas NZ Ltd Greymouth Petroleum

Greypower Heinz Watties Ltd

HP Consulting & Integration J H Vernon Consultancy Kensington Swan

LECG

Loyalty NZ Ltd

LPG Association of New Zealand Major Electricity Users Group

Marsh Limited Maui Development Ltd

M-Co

Methanex New Zealand

Mighty River Power

Ministry of Civil Defence and Emergency Management

Ministry of Consumer Affairs Ministry of Economic Development

Ministry of Research, Science & Technology

Multigas (NZ) Ltd

National Council of Women New Zealand Oil and Gas Ltd New Zealand Refining Co Ltd Neil Walbran Consulting Ltd

New Zealand Steel NGC Metering Ltd Norske Skog Tasman Ltd

Nova Gas Ltd

NZ Water and Wastes Association

N7X

O-I New Zealand Ltd OMV New Zealand Ltd

On Gas Industrial & Commercial

Origin Energy NZ

Pan Pac Forest Products Ltd

Parliament

Parsons Brinkerhoff Associates

Penshaws Ltd PEPANZ Powerco Ltd

Pricewaterhouse Coopers

RBZ Energy Ltd Russell McVeagh

Shell (Petroleum Mining) Ltd Shell Todd Oil Services Ltd

Simpson Grierson Stigley & Co

Strata Energy Consulting

Swift Energy Ltd Tap Oil Ltd Tatua Co-op Dairy Tetenburg & Associates

The Australian Gas Light Company

Thorndon Chambers
Todd Energy Ltd
Transpower
Vector Ltd
Wangapui Gas Ltd

Wanganui Gas Ltd Westech Energy

Appendix 3: Notice for Gazette

Notice of Making of an Assessment and Recommendation for Gas Governance Rules

This notice of a recommendation and assessment for gas governance rules is issued by Gas Industry Company Limited ("Gas Industry Co") approved as the industry body by Order in Council under section 43ZL of the Gas Act 1992 (the "Act").

Section 43O of the Act provides that, no later than 10 working days after making a recommendation for a gas governance regulation to the Minister of Energy, Gas Industry Co must publicise the recommendation and the assessment completed under section 43N of the Act.

Recommendation

On 12 March 2008 Gas Industry Co made a recommendation to the Minister of Energy for approval of the Gas (Downstream Reconciliation) Rules 2008 to provide for the establishment of a downstream allocation and reconciliation regime. The rules will:

- implement a number of mandatory information quality measures;
- provide for the appointment of a single downstream allocation agent by Gas Industry Co;
- establish that the month end daily allocation service will be performed using a specified global methodology on all gas gates to ensure that gas quantities and UFG are more fairly and accurately allocated across all retailers;
- provide for greater transparency through publication of a range of information, including UFG quantities;
- mandate clear, transparent governance structures and related processes;
- allow for the performance of audits and the establishment of a compliance regime; and
- provide for the granting of exemptions by Gas Industry Co, where appropriate.

A recommendation for amendments to the proposed Gas (Compliance) Regulations was made in conjunction with this recommendation.

A copy of Gas Industry Co's recommendation, including the assessment, is available at no cost on Gas Industry Co's website: http://www.gasindustry.co.nz

Dated at Wellington this th day of March 2008.

For and on behalf of Gas Industry Co Rt. Hon. James Bolger ONZ, Chair

Appendix 4: Notice for website

Under section 430 of the Gas Act 1992 Gas Industry Co must, no later than 10 working days after making a recommendation to the Minister of Energy on gas governance arrangements, publicise that recommendation and the assessment completed under section 43N of the Act.

On 12 March 2008, Gas Industry Co made a recommendation in respect of arrangements for the allocation and reconciliation of downstream gas quantities. The text of this recommendation, including the assessments under section 43N of the Act, are available through the website link below:

Recommendation to the Minister of Energy on Arrangements for the Allocation and Reconciliation of Downstream Gas Quantities

Appendix 5: Gas (Downstream Reconciliation) Rules