



Statement of Proposal Transmission Pipeline Balancing

Date issued: October 2009
Submissions close: 30 October 2009





About Gas Industry Co.

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 infrastructure; and
 - consumer outcomes;
- administer, oversee compliance with, and review such arrangements; and
- report regularly to the Minister of Energy and Resources on the performance and present state of the New Zealand gas industry, and the achievement of Government's policy objectives for the gas sector.

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Submissions close: 30 October 2009

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Executive summary

Gas Industry Co has completed its review of New Zealand transmission pipeline balancing and has concluded that a regulatory solution is the preferred option for improving balancing arrangements and meeting the objectives of the Gas Act and GPS. Gas Industry Co has determined that the participative regulation option, first described in the Transmission Pipeline Second Options Paper, should be pursued.

A central feature of the participative regulation option is that the pipeline owners have an opportunity to develop, consult on, and agree a 'balancing plan' and submit it to Gas Industry Co for approval. The plan must meet the requirements of balancing rules. If the owners cannot submit an acceptable plan, Gas Industry Co will develop the plan.

In response to a strong lobby of opinion in submissions on the Second Options Paper, Gas Industry Co has also launched an industry code development (ICD) process. The process involves Gas Industry Co working intensively with industry participants to explore whether further improvements to balancing arrangements are possible through changes to existing industry contracts. The outcome of this process may impact on the final recommendation.

Gas Industry Co will continue to work towards making a formal recommendation on balancing arrangements before the end of the calendar year. If the scope and/or detail of the proposed rules change significantly as a result of the ICD process, a further statement of proposal will be issued.

We encourage and welcome feedback from stakeholders on this statement of proposal. We ask that submissions are received by Friday 30 October 2009. This will allow us time to consider your views and incorporate feedback into a recommendation to the Minister of Energy and Resources in December.

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1

Introduction

1.1 Purpose of this document

Gas Industry Company Limited (Gas Industry Co) has been reviewing balancing arrangements on New Zealand's high pressure transmission pipelines to assess whether those arrangements meet the objectives of the Gas Act 1992 (Gas Act) and April 2008 Government Policy Statement on Gas Governance (GPS). The review is now complete and Gas Industry Co has determined that a regulatory solution is necessary. However, in light of submissions received on the Transmission Pipeline Balancing Second Options Paper (Second Options Paper), Gas Industry Co has also decided to propose a process aimed at minimising the scope of the rules¹, while targeting a more unified balancing regime.

The proposed industry code development (ICD) process will run in parallel to the development of rules for transmission pipeline balancing with the intention of making a recommendation to the Minister of Energy and Resources (the Minister) before the end of the year. Gas Industry Co will assist in the facilitation of this project, the details of which are canvassed in section 5.4 of this paper.

Prior to making any recommendation to the Minister, section 43N(1)(d) of the Gas Act requires Gas Industry Co to prepare a formal statement of the proposed arrangements and to undertake consultation on the proposal. This document is Gas Industry Co's Transmission Pipeline Balancing Statement of Proposal (Statement of Proposal) in accordance with the requirements of the Gas Act.

1.2 Structure of this document

The remainder of this document is structured as follows:

- **Section 2: Background** sets out the background to Gas Industry Co's Statement of Proposal, including an overview of the balancing review process and the consultation that has occurred to date.
- **Section 3: Legislative framework** describes the legislative framework, including the obligations Gas Industry Co has before making a formal recommendation to the Minister.

¹ On further consideration, Gas Industry Co has determined that rules will be more appropriate than regulations for the purposes of balancing arrangements. See section 3.4 for further explanation on this decision.

- **Section 4: Regulatory objective** explains Gas Industry Co's regulatory objective for the purpose of assessing the reasonably practicable options in accordance with section 43N of the Gas Act.
- **Section 5: Assessment of options** sets out Gas Industry Co's identification and assessment of reasonably practicable options.
- **Section 6: Statement of Proposal** outlines Gas Industry Co's Statement of Proposal for New Zealand transmission pipeline balancing arrangements.
- **Section 7: Details of proposal** further details Gas Industry Co's Statement of Proposal
- **Section 8: Conclusion** summarises the conclusions reached on the Statement of Proposal.
- **Section 9: Next steps** sets out the proposed timetable to enable a recommendation to be made to the Minister by the end of the 2009 calendar year.

1.3 Invitations for submissions

Gas Industry Co invites submissions on the Statement of Proposal. We are particularly seeking responses to the questions that are highlighted at various points in the paper. Submissions on the questions should be provided in the format shown in Appendix A.

Submissions are due by **5pm on Friday, 30 October 2009**. Please note that submissions received after this date may not be able to be considered.

We prefer receiving submissions in electronic form (Microsoft Word format and PDF). Submissions may be uploaded on our website at www.gasindustry.co.nz. You will need to log in as a user and upload the submission on the consultation page by clicking on the submissions button.

Gas Industry Co will acknowledge receipt of all submissions electronically. If you do not receive electronic acknowledgement of your submission within two business days, please contact Jay Jefferies on 04 472 1800.

Gas Industry Co values openness and transparency and therefore submissions will generally be made available to the public on our website. If you intend to provide confidential information in your submission, please discuss this first with Ian Wilson at Gas Industry Co (04 472 1800).

2

Background

2.1 Why is transmission pipeline balancing an issue?

Transmission pipeline balancing is the management of the inventory of gas in a pipeline, known as linepack. Linepack must be managed to keep the gas pressure in the pipeline within safe limits; that is, below the safe physical operating limit for the pipeline and above the minimum required to maintain actual supply of gas to consumers.

Without effective balancing, reliable transportation of gas is impossible. Effective balancing of transmission pipelines is therefore a key element of successful open access.

Concerns about the current New Zealand balancing arrangements became a key feature of the Gas Industry Co June 2006 Transmission Access Review. Various issues were of concern, including, for example: poor information on balancing status; slow processes for notifying and correcting imbalances; non-market pricing of balancing gas; poor targeting of balancing costs to causers²; and high transaction costs.

This Statement of Proposal seeks to address a number of priority issues related to transmission pipeline balancing.

2.2 The balancing review process

Since concerns were first raised, and as required by the Gas Act³, Gas Industry Co has followed an extensive review and consultation process. That process has included holding workshops and meetings with stakeholders, establishing and working with the Transmission Pipeline Balancing Advisory Group (TPBAG), and publishing various expert reports and consultation documents.⁴ Appendix D of this paper contains a complete background to the Transmission Access and Balancing review. A summary of the balancing review process is found in the table below.

² In this paper a 'causer' refers to a system user who has an imbalance position in excess of tolerance and in the same direction as a pipeline imbalance that has been corrected by selling or buying balancing gas (ie taking a 'balancing action').

³ Section 43L of the Gas Act sets out the steps Gas Industry Co must take before making a recommendation for gas governance rules or regulations including recognising all reasonably practicable options (under section 43N) and consulting with persons likely to be substantially affected by the proposed regulations.

⁴ All related documents can be found on Gas Industry Co's website.

Table 1 Summary of balancing review process

Date	Title	Objective	Conclusions/ Outcomes
April 2008	Transmission Pipeline Balancing Research Paper	To inform discussion with industry participants on how transmission pipeline balancing arrangements can be improved.	A range of issues were discussed in the paper and the principal concerns were explained.
April 2008	Establishment of TPBAG	To advise Gas Industry Co on the technical and commercial aspects of transmission pipeline balancing.	Interaction with the TPBAG has assisted Gas Industry Co to develop policy which should be both effective and practical.
August 2008	Transmission Pipeline Balancing Issues Paper	To identify, describe, and analyse the issues.	The paper provided a clear exposition of concerns with the then current balancing arrangements.
November 2008	Transmission Pipeline Balancing Issues Paper- Analysis of Submissions	To outline the submissions received and identify the common themes. The paper also contained Gas Industry Co's consideration of matters raised in submissions.	Gas Industry Co concluded that it would continue to work with the TPBAG, which would provide a forum to discuss balancing design options to address Gas Industry Co and industry concerns.
December 2008	Transmission Pipeline Balancing Options Paper	To set out options for addressing balancing issues, in particular by proposing the appointment of an independent Balancing Agent.	The paper outlined Gas Industry Co's hybrid proposal and identified further work that needed to take place to progress it along with a possible timeline.
May 2009	Transmission Pipeline Balancing Options Paper- Analysis of Submissions	To outline the submissions received and identify the common themes. The paper also contained Gas Industry Co's consideration of matters raised in submissions.	Gas Industry Co determined that it would further refine the options with the help of the TPBAG and issue another paper for consultation. It would also meet with the TSOs to discuss how to manage the possible termination of Vector's interconnection agreement with MDL.
July 2009	Transmission Pipeline Balancing Second Options Paper	To set out options for addressing balancing issues, recognising industry concerns raised with the earlier option proposed. Four options were presented.	Gas Industry Co's analysis of the options identified the participative regulation option as its preferred option. Gas Industry Co noted that its aim was to make a recommendation to the Minister before the end of the year to introduce regulation to give effect to the option.

Date	Title	Objective	Conclusions/ Outcomes
September 2009	Transmission Pipeline Balancing Second Options Paper- Analysis of Submissions	To summarise the ten submissions received and to identify common themes. This paper also contained Gas Industry Co's consideration of the matters raised in submissions as well as the next steps of the balancing review.	Gas Industry Co concluded that rules are still necessary and that a recommendation would be made before the end of the year. However, an industry process aimed at minimising the scope of the rules would also be progressed in parallel.

2.3 Overview of issues identified

In the Transmission Pipeline Balancing Issues Paper (Issues Paper) of August 2008, Gas Industry Co identified issues with the then current balancing arrangements. Twelve main issues were identified through the TPBAG assessment and a further nine from Gas Industry Co's review of balancing arrangements against the European Regulators Group for Electricity and Gas (ERGEG) principles.⁵ Considerable overlap existed between the two lists and Gas Industry Co consolidated the issues into one comprising nine main balancing issues.

Table 2 Balancing issues identified in the Issues Paper

Balancing issues	Explanation
Poor Governance	Existing balancing provisions are unclear or hard to enforce; it is hard to gain agreement on changes needed.
Role of Balancing Agent unclear.	Security of supply obligations on the Balancing Agent are unclear.
Poor information on balancing status	Users—especially mass market retailers—have poor information on current imbalances.
Multi-day balancing and pricing period	Whilst nominally one day, the balancing period extends over several days, due to Imbalance Limit Overrun Notice (ILON) provisions and pricing lags.
Poor transparency	It is unclear to users how balancing costs are incurred and how prices to users are set.
Poor allocation of positive imbalance costs	Charges to users for positive imbalances are much less than the costs that these imbalances create.
Competing Balancing Agent	There is potential for the two Balancing Agents to be in conflict and add to the costs and complexity.
High transaction costs	The complexity of balancing arrangements may give rise to unnecessarily high transaction costs.
Inappropriate tolerances	Tolerances may be too high in aggregate (compared with linepack limits) and not allocated to those who value them most.

Source: Transmission Pipeline Balancing Issues Paper, p35, section 6.

⁵See 'Guidelines of Good Practice for Gas Balancing (GGPGB) E06-GFG-17-04', ERGEG, 6 December 2006.

Changes since issues first identified

Changes have occurred since the issues were first identified, which have caused several participants to consider whether a number of the issues first identified were still present. In particular, participants cited⁶:

- the removal of legacy provisions from the Maui Pipeline Operating Code (MPOC)⁷; and
- changes to Maui pipeline residual balancing arrangements, including:
 - revised balancing instructions and operating procedures for balancing gas;
 - further development of Maui Development Limited's (MDL) 'Dashboard' (showing balancing gas transactions); and
 - introduction of MDL's Balancing Gas Exchange (BGX) (a 'spot market' for balancing gas).

In the Second Options Paper, Gas Industry Co acknowledged the changes; however, it did not consider they demonstrated how balancing arrangements fulfilled Gas Act and the GPS objectives. Gas Industry Co believes that addressing balancing issues would require attention be given to the following:

- allocation of cost to causers and transparency of balancing transactions;
- transparency of linepack accounting (publishing details of transactions, both gigajoule and dollar amounts);
- a review of tolerances, including consideration as to whether they are necessary and if so how they are set; and
- treatment of unaccounted for gas (UFG) to avoid distortions of balancing transactions.

In its submission to the Second Options Paper, MDL identified a work programme outlining a number of changes it is progressing with the intention of improving balancing arrangements while meeting the objectives set by Gas Industry Co.

⁶ See section 1.3 and 1.4 of the Second Options Paper for an overview of these changes.

⁷ Until recently, pipeline balancing was largely managed through gas supply flexibility from the Maui Gas field, at no explicit cost to pipeline users. Even after the Maui pipeline became an open access pipeline in 2005, the overhang of legacy arrangements prevented the true cost of balancing being passed through to the beneficiaries of balancing services. During this period, both the Maui and Vector pipelines experienced significant volatility in imbalance, well beyond linepack flexibility.

Appendix A of the Second Options Paper Analysis of Submissions contained Gas Industry Co's full analysis and response to MDL's work programme. We noted our overall support for the progression of these changes, including MDL's commitment to improve the balancing market by:

- increasing transparency:
 - of the balancing market (prices and gigajoule) amounts through the BGX; and
 - of the Balancing Agent (role and functions) through revised Standing Operating Procedures⁸ and changes to the MPOC.
- exploring options to extend the balancing market by offering balancing services to Transmission Pipeline Welded Points;
- investigating changes to the MPOC to better target costs to causers in a timely manner through the possible adoption of back-to-back cash-outs; and
- considering the adoption of Gas Industry Co's Rulings Panel to provide for enforcement of the regime and the appropriate disputes resolution.

We also stated our support of MDL's commitment to finding ways to increase transparency of data available on the BGX. In particular the recent changes to the information available on the BGX includes:

- BGX financial disclosures, which disclose gigajoule quantities and price, total transaction costs, time of transactions and a monthly summary of balancing transactions;
- BGX price index tracker, which tracks high, low and average bid and offer prices and is updated at the end of each month; and
- operational imbalance data will now display the day before data on the morning before the aggregate data is available.

In its response, Gas Industry Co recognised the proposed changes and the improvements that would be gained from each but noted that the changes would still not achieve a unified balancing regime across both transmission systems. In order to promote productive efficiency, Gas Industry Co maintains

⁸ Standing Operating Procedures contain instructions on when actions in relation to managing the Maui pipeline are taken. These are published on the MDL Information Exchange under 'publications'.

the view that barriers to operating in the balancing market should be minimised and that the market should be as open as possible.

We also recognised that the proposed revised Standing Operating Procedures would help participants better understand the circumstances in which the Balancing Agent takes actions. Further, we are of the view that participants should have an opportunity to submit feedback on the Standing Operating Procedures. Since these changes impact on the pipeline users just as much as the Transmission System Owners (TSO), consultation should take place.

In our response, we also pointed out a number of other areas that MDL's work programme does not cover that would be under the proposed rules.

Gas Industry Co comment on changes

In response to views expressed in submissions received on both Options Papers that improvements are underway, we have determined to take a two-fold approach. We will continue to pursue our preferred option, the participative regulation option, with the aim of making a recommendation to the Minister by the end of the year. Additionally, Gas Industry Co has also determined that it may be possible to reduce the scope of rules if the industry can address some of the issues through contractual arrangements. To explore this possibility, Gas Industry Co is leading the ICD process. The ICD process will run in parallel to our continued development of the rules. Section 5.4 contains an overview of this process.

3

Legislative framework

This section describes the legislative framework which Gas Industry Co as the 'Industry Body'⁹ must comply with when making recommendations for rules and regulations, including its rule and regulation making powers under the Gas Act.

3.1 Rule and regulation making powers under Gas Act

The Gas Act allows for the Government to directly regulate gas industry participants to ensure effective outcomes for consumers of gas.

The proposed balancing rules would primarily be made under the following sections of the Gas Act:

- section 43F(2)(c) (reasonable terms and conditions for access to transmission pipelines);
- section 43F(2)(a) (establishment and operation of wholesale markets for gas, including protocols and standards for reconciling and balancing gas etc); and
- section 43S (providing for a person or persons to carry out functions in relation to those regulations etc).

3.2 Gas Act requirements when recommending rules and regulations

Section 43L(1): Consultation

Prior to making a recommendation to the Minister, Gas Industry Co must first comply with section 43L(1) of the Gas Act. This section requires Gas Industry Co to:

- (a) undertake an assessment under section 43N; and
- (b) consult with all persons the recommending body thinks are representative of the interests of persons likely to be substantively affected by the proposed regulation; and

⁹ The 'industry body' means the body approved by Order in Council under s43ZL of the Gas Act, which at present is Gas Industry Co.

- (c) give those persons an opportunity to make submissions; and
- (d) consider those submissions.

Section 43N(1): Assessment

The assessment under section 43N(1) of the Gas Act requires Gas Industry Co 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
 - (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).

Section 43N(2) Statement of Proposal

A statement of proposal must, under section 43N(2) of the Gas Act, contain:

- (a) a detailed statement of the proposal;
- (b) a statement of the reasons for the proposal;
- (c) an assessment of the reasonably practicable options, including the proposal, identified under subsection [43N](1); and
- (d) other information that the industry body... considers relevant.

3.3 Monitoring and enforcement of rules

As noted earlier, one of the issues identified in the Issues Paper was that there was poor governance of existing balancing provisions. To ensure governance issues are adequately addressed under new balancing arrangements, the balancing rules require a compliance regime. Gas Industry Co considers that the compliance regime which applies to other rules and regulations we have introduced is the

most natural solution. To allow for this, it will be necessary to make a recommendation to the Minister to amend the Gas Governance (Compliance) Regulations 2008 (Compliance Regulations) for the inclusion of balancing rules. A similar recommendation was made for the Gas Governance (Critical Contingency Management) Regulations 2008 (Critical Contingency Management Regulations).¹⁰ Appendix C contains an overview of the changes that would be required.

Compliance Regulations

The Compliance Regulations came into effect on 11 September 2008. The regulations are important in that they:

- govern the rights of individuals in respect of the imposition of remedies;
- govern investigative powers and obligations to cooperate with investigations, including a right of entry into industry participant's premises, as specified by the Gas Act;
- govern the possible remedies, including compensation, available to a person affected by a participant's breach of the proposed rules, as specified by the Gas Act; and
- create a dispute resolution body defined by the Gas Act for the purposes of the rules.

The Compliance Regulations also:

- contain matters of general principle in the determination of rule/regulation 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
- has a wider application than to only industry participants.

Further, the Compliance Regulations provide for:

- a Market Administrator which has responsibility for receiving notices of reported breaches of the rules, attending to administrative tasks, determining the materiality of breaches, and attempting to resolve any immaterial breach with the agreement of the parties;

¹⁰ The Compliance Regulations and the recommendation to amend the regulations to include the Critical Contingency Management Regulations are both available on Gas Industry Co's website.

- an Investigator who investigates material or unresolved immaterial breaches, endeavours to settle the matter, and refers settlements and unresolved breaches to the Rulings Panel; and
- a one-member Rulings Panel that approves or rejects settlements, determines unresolved breaches, and orders remedies.

3.4 Rules or regulations

Section 43Q(1) of the Gas Act allows the Minister to make a rule for all or any of the purposes for which a gas governance regulation may be made. When deciding whether to make a recommendation for a rule, section 43Q(2), outlines that the Minister must only have regard for the following:

- (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 general public:
 - ii. whether the benefits of the publication in accordance with section 43R rather than the Acts and Regulations Publications Act 1989 outweigh the costs of publication by that method:
- (d) the expertise and rule-making procedures of the recommending body.

While the previous options papers have discussed various options for regulations to introduce the new balancing regime, now that more detailed work has been carried out and the proposed regime has been further refined, Gas Industry Co has revisited whether or not the regime could be more appropriately introduced via rules made under s43Q(1) of the Gas Act.

In doing so, Gas Industry Co formed the view that it may be more appropriate to recommend rules rather than regulations. Rules under the Gas Act are notified in the *Gazette* and have the status of regulations for disallowance purposes. The main difference being they are not published in the hard copy statutes and regulations series or on most legislative databases.

After consultation with the relevant government agencies, Gas Industry Co's view has been confirmed that rules are more appropriate given the proposed balancing arrangements:

- apply only to industry participants, including- TSOs, gas shippers, gas traders, and transmission system interconnected parties;
- are largely technical and govern a limited domain of processes for procuring and allocating quantities of balancing gas; and
- are aimed at making the residual balancing market more efficient by providing processes that unify the two transmission systems.

Appendix B contains the draft Gas Governance (Balancing) Rules.

4

Regulatory objectives

4.1 General objectives and outcomes

The Gas Act

Gas Industry Co must ensure alignment with the Gas Act and GPS objectives when recommending gas governance regulations and rules. Part 4A of the Gas Act relates to governance of the gas industry. In particular, section 43ZN sets out the objectives of Gas Industry Co as the Industry Body in relation to gas governance rules and regulations. Section 43ZN states that the principle objective of Gas Industry Co in recommending gas governance rules and regulations under section 43F is to:

‘...ensure that gas is delivered to existing and new customers in a safe, efficient, and reliable manner’.

The other objectives are:

- ‘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;
- barriers to competition in the gas industry are minimised;
- incentives for investment in gas processing facilities, transmission, and distribution are maintained or enhanced;
- delivered gas costs and prices are subject to sustained downward pressure;
- risks relating to security of supply, including transport arrangements, are properly and efficiently managed by all parties; and
- consistency with the Government's gas safety regime is maintained’.

GPS

The GPS states that it is also this Government's objective to take account of fairness and environmental sustainability in all its recommendations. Therefore, it is the Government's objective for the entire gas industry to:

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

It is against this objective that Gas Industry Co must take into account when making any recommendations and against which it must report.

Paragraph 12 of the GPS adds five additional objectives Gas Industry Co must have regard for when making recommendations:

- energy and other resources used to deliver gas to consumers are used efficiently;
- competition is facilitated in upstream and downstream gas markets by minimizing barriers to access to essential infrastructure to the long-term benefit of end users;
- the full costs of producing and transporting gas are signaled to consumers;
- the quality of gas services where those services include a trade-off between quality and price, as far as possible, reflect customers' preferences; and
- the gas sector contributes to the Government's climate change objectives as set out in the New Zealand Energy Strategy, or any other document the Associate Minister of Energy may specify from time to time, by minimizing gas losses and promoting demand-side management and energy efficiency.

4.2 Specific transmission pipeline balancing objectives

The Gas Act

Section 43F of the Gas Act provides that rules or regulations may be made for all or any of the purposes on section 43F(2). Those purposes specifically relating to transmission pipeline balancing include:

'(a) providing for the establishment and operation of wholesale markets for gas, including protocols and standards for reconciling and balancing gas etc; and...

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

GPS

The GPS identifies the specific outcomes for the gas industry against which Gas Industry Co must report. These are consistent with the objectives found under the Gas Act. The outcomes relevant to transmission pipeline balancing include:

‘Gas industry participants and new entrants are able to access the following physical assets and related services:

- Third party gas processing facilities;
- Transmission pipelines; and
- Distribution pipelines;

On reasonable terms and conditions’.

The other outcomes relevant include:

‘Gas governance arrangements are supported by appropriate compliance and dispute resolution processes’.

Gas Industry Co’s regulatory objective

In the Options Paper, Gas Industry Co established two key principles for gas balancing arrangements¹¹:

- balancing arrangements should aim to achieve balancing at least cost, where ‘cost’ includes transaction costs for users; and
- users should be able to manage risks associated with balancing charges, including having good knowledge of their balancing positions and ability to hedge price risk.

In general, submitters agreed that the objectives identified in the Options Paper are appropriate for analysing balancing options. However, some submitters noted that the objective of ‘least cost’ balancing must be considered in the context of security of supply. Some also suggested that ‘least cost’ must refer to long-run costs to the economy rather than the cost to an individual or group of

¹¹ See section 2 of the Options Paper for the complete analysis.

individuals. Another suggestion was that the ERGEG principles offered a more useful and comprehensive framework for analysis.

In response to stakeholder concerns, Gas Industry Co amended the regulatory objective in the Second Options Paper. The proposed regulatory objective was:

To provide an efficient, single balancing arrangement for managing pipeline imbalance.

In general, submissions considered that this regulatory objective was appropriate. On further deliberation, we considered that the use of 'single' might, in line with several submitters' suggestions, be too narrow. We therefore, propose the word 'unified' be used instead. This would allow more flexibility when balancing plans are being devised to ensure that provisions across pipelines are linked to one another. Thereby making the regulatory objective as follows:

To provide an efficient, unified balancing arrangement for managing pipeline imbalance.

Gas Industry Co considers that this regulatory objective is appropriate for the purposes of assessing the reasonably practicable options for the purposes of section 43N of the Gas Act.

5

Assessment of options

Section 3.2 outlined the requirements Gas Industry Co must fulfil under sections 43N(1) and 43N(2) of the Gas Act prior to making a recommendation. This section provides information demonstrating how Gas Industry Co has met each of these requirements in the course of developing this Statement of Proposal.

Section 5.1 relates to the first options paper (December 2008) and Section 5.2 relates to the second options paper (July 2009).

5.1 Transmission Balancing Options Paper

As noted earlier, the Options Paper contained Gas Industry Co's initial proposal for improving gas balancing arrangements. The main components of the preferred option included:

- recommending regulations to the Minister for the appointment of an independent Balancing Agent;
- commissioning an independent expert review of MPOC tolerances;
- suggesting changes for MPOC parties to consider;
- developing daily allocation options to lessen the risks for mass market retailers; and
- developing options for further nominations.

Identification of reasonably practicable options

In the Options Paper, Gas Industry Co sought a solution that maximised efficiency (that is, least cost balancing) subject to ensuring that retailers can manage risks associated with balancing costs. The solution proposed was identified as the 'hybrid' approach comprising a number of developments that would result in a final solution. The necessary developments identified by Gas Industry Co were identified as follows:

- the need to review tolerances; and

- changes to the MPOC in order to:
 - enable back-to-back cash-outs;
 - allow balancing prices to reflect costs; and
 - provide for damages for over-pressure episodes.

Core design features

Further, Gas Industry Co identified two core design features we believed were necessary to improve balancing arrangements. They were that: users should retain the primary responsibility for balancing; and that some party will need to undertake a residual balancing role. Our initial view was that the residual balancing role should be undertaken by a single and independent Balancing Agent.¹²

Design features under review

In the paper, Gas Industry Co identified design features that needed further consideration. These included:

- options for procuring balancing gas by the Balancing Agent (including a spot market and portfolio of contracts);
- daily allocation options; and
- extended nomination options.¹³

Assessment of reasonably practicable options

To assess the option identified, Gas Industry Co extrapolated its efficiency objective into a list of criteria. The criteria for an efficient market was supplemented by the ERGEG design principles.

Assessment of core design features

The assessment of the first feature, that users would have the primary responsibility for balancing confirmed our view that it was necessary. This is mainly because, unlike electricity, there is no gross pool spot market for gas in New Zealand. Therefore, users cannot rely on flexible supply to manage their balancing risks.

¹² That is, independent from a TSO, and therefore able to take decisions that are not at risk of being influenced by other interests of that TSO.

¹³ The 'extended nomination' proposal is the proposal outlined in Vector's submission on the Issues Paper available on Gas Industry Co's website.

The assessment of a single Balancing Agent also showed that it would be more efficient to have only one party taking actions rather than two, which could increase the possibility for conflict. Moreover, the costs for one are likely to be less than if there were two. Two balancing markets would also run the risk of being inefficient as spare capacity would be split rather than pooled. We did, however, note that providing an independent Balancing Agent may prove difficult in terms of establishing governance and accountability between the agent and the TSOs. Our support for an independent role also addressed previous participants' concerns about:

- lack of independence from other parts of TSOs' businesses, particularly gas trading;
- lack of incentives to achieve balancing at least cost and maximise market efficiency;
- principal-agent problems, given that the Balancing Agent (the TSO) will have different incentives to the community of users it is acting on behalf of; and
- Vector, at least, indicating an unwillingness to continue in the role of Balancing Agent.

Despite concerns, Gas Industry Co concluded that a single independent Balancing Agent is likely to be the best option for the industry as it would provide:

- a means of managing both pipeline systems as a whole (greater harmonisation);
- higher balancing market efficiency; and
- the ability for users to hedge against balancing price risk.

Further, it was determined that the independent Balancing Agent function would only need to bring about improvements in the order of 5% to cover the estimated establishment cost of \$2m.¹⁴ From this point of view, Gas Industry Co considered that the benefits seemed achievable.

Preliminary assessment of design features under review

The two procurement options assessed were a portfolio of contracts or a spot market. Our preliminary assessment showed the balancing spot market to be a more favourable option. The spot market would allow for the ability to pool any supply flexibility on the day as well as to enable users to better manage their risks. Further, the assessment also considered there were a number of important market rules (ie open to all credible suppliers, transparent, marginally priced, etc) that could be applied to make it the most efficient means of procurement.

¹⁴ See section 5 of the Options Paper for the complete analysis.

The preliminary assessment of the daily allocation option indicated that determining each user's daily allocation of gas gate deliveries from earlier market shares would best enable users to self-balance and avoid cash-out. It was suggested that a daily, historically-based algorithm could be applied independently of the Gas (Downstream Reconciliation) Rules 2008 and used only to determine a user's balance position and allocation of balancing costs.

In its submission on the Issues Paper, Vector presented an 'extended nominations' proposal. Upon review of the extended nomination options, Gas Industry Co's preliminary assessment concluded that, while the proposal contained many features that could improve balancing, it may go further than necessary. Moreover, we had concerns that the cost of implementation was likely to be high.

Analysis of submissions

In May 2009, Gas Industry Co released an Analysis of Submissions on the Transmission Pipeline Balancing Options Paper. The submissions received indicated widespread support for a single balancing regime; however, they all raised concerns about the cost of achieving this by creating an independent Balancing Agent contracted to Gas Industry Co. Many submitters also believed that more work was needed to define the Balancing Agent function, and the degree of 'independence' that was required (some felt that existing ring-fencing arrangements are sufficient). Also, MDL considered that a pipeline owner's 'sovereignty' over its own business should not be infringed without compelling reasons.

We accepted that costs should be minimised providing that balancing is being achieved efficiently, including governance arrangements that ensure stable and enduring pipeline balancing.

As discussed in section 2, submitters noted that they felt balancing behaviour had improved as a result of the removal of the legacy provisions from the MPOC (on 12 December 2008). Also, it was suggested that subsequent changes to MDL's balancing procurement arrangements may resolve some of the concerns raised in the Options Paper.

Gas Industry Co acknowledged the progress MDL had made, but noted that the MPOC contained too few provisions to ensure that the Balancing Agent will conduct balancing operations in a way that is consistent with Gas Act objectives. We considered that such provisions could be built into the MPOC, but to provide confidence that they would endure would require regulation.

We also acknowledged submitters' concerns about the operation of the Vector Balancing and Peaking Pool (BPP). One submitter felt that regulation may be required to remedy the situation. For example, Vector noted that, if it withdrew from its interconnection agreement with MDL, a new mechanism for recovering imbalance charges would need to be developed.¹⁵

¹⁵ The current operation balancing arrangement (OBA) is a feature of the interconnection arrangements between the two pipelines. Section 22.9 of the MPOC permits Vector (as a Welded Party) to terminate its interconnection agreement with MDL on 90 days' notice. If Vector did terminate, Vector and MDL would need to agree on alternative arrangements for interconnection.

The Options Paper suggested ways of allocating daily balance positions at mass market delivery points (that is, locations where distribution networks interconnect with the transmission pipelines). The preferred option was the use of an algorithm based on historic month-end allocations. Most submitters agreed, but considered that deliveries to large end-users would have to be deducted from the delivery point quantities before allocation takes place. Making these deductions would increase the complexity and cost of this option substantially, and might make it unviable.

Overall, submissions disagreed with Gas Industry Co's preliminary assessment of procurement options, citing that current arrangements could meet the requirements. We considered this disagreement stemmed from our miscommunication of what was meant by a 'spot market'. We envisaged a market as offering and clearing on-the-day quantities and process of balancing gas, reflecting all available spare capacity. Submitters further felt that MDL was already running close to an efficient spot market. We noted our support of this development, but considered that it was still not as efficient as it could be, as an efficient market would:

- include all available capacity (such as that connected to the Vector system);
- send efficient price signals to users (efficient prices being the marginal cost of balancing to both supplier and causer); and
- enable users to manage price risk.

In terms of the extended nominations proposal, most submitters felt the proposal warranted further consideration but one disagreed with it, believing it promoted discriminatory treatment of end-users. Gas Industry Co noted the wide range of views on the matter and identified that the proposal needed to be further developed before it could be adequately assessed.

Vector continued to be of the view that a '...fundamental and comprehensive redesign of the regime, implemented through regulations, is the only way to achieve an effective solution to pipeline balancing'. Other submitters preferred an incremental approach, but had differing views on how much and what needed to be changed.

Several submitters raised security of supply as an issue. MDL also cautioned against the view that pipeline balancing can be separated from the other tasks governing physical security of the pipeline.

One submitter advocated daily cash-out of excess operational imbalance, a position also favoured by MDL. Other submitters considered that cash-outs should only occur when balancing actions are taken.

Gas Industry Co acknowledged that some progress towards resolving balancing issues had been achieved, but that it had to ensure that such improvements, even if they are working to everyone's satisfaction, were efficient and durable.

5.2 Transmission Balancing Second Options Paper

In light of submissions received on the Options Paper, and changes that occurred since its publication, Gas Industry Co recognised that there was a need to develop a further set of options. In July 2009, Gas Industry Co released the Second Options Paper. The paper presented four reasonably practicable options that Gas Industry Co believed had potential to improve the balancing market.

Establishing the scope

Through the consultation process, Gas Industry Co was able to further refine the scope of the proposed regulatory solutions. The issues first identified, and new ones that had arisen would continue to be high priority; but to make the work programme more manageable, Gas Industry Co believed that it was important to limit the scope of the regulatory options presented in the paper. The limited scope allowed for a focus on the management of pipeline imbalance¹⁶ between linepack limits through the buying and selling of balancing gas.

The targeted 'in scope' items of the proposed regulatory options and the 'out of scope' items were provided in section 2 of the paper and replicated in the table below.

Table 3 Scope of proposed regulatory options

Inside the scope of proposed regulatory options
<p>The management of individual user imbalance, including requiring each user to:</p> <ul style="list-style-type: none"> • maintain a balanced position; and • accept a share of a balancing gas trade where the user has failed to balance and has contributed to the need for the balancing action. <p>The management of pipeline imbalance, including:</p> <ul style="list-style-type: none"> • requiring a single Balancing Agent to manage linepack on both the Maui and Vector pipelines; • describing the role and responsibilities of the Balancing Agent; • requiring the Balancing Agent to: <ul style="list-style-type: none"> ○ procure balancing gas on an open market; ○ use back-to-back cash-out¹⁷; and ○ disclose GJ and \$ linepack transactions. • defining the use of curtailment where there is insufficient balancing gas available, including the potential for damage claims if necessary; • requiring TSOs to co-operate with the Balancing Agent and provide it with access to information and systems necessary to perform its role. <p>The management of disputes and policy changes, including:</p>

¹⁶ Pipeline imbalance is also commonly referred to as 'residual' or 'aggregate' imbalance, being the imbalance that remains when all individual user imbalances are added together.

¹⁷ See appendix F of the Second Options Paper for a description of how Gas Industry Co envisages back-to-back cash-outs will work in practice.

- a requirement that all disputes are referred to the Rulings Panel; and
- a balancing policy establishment and change process (for the participative regulation option).

Outside the scope of proposed regulatory options

Matters that Gas Industry Co is continuing to work on with the industry include:

- investigating the potential to improve balancing by allocating on-the-day-after gas flow (known as 'D+1 allocation');
- investigating extended nominations; and
- reviewing tolerances.

Matters that Gas Industry Co will review in future include:

- upstream allocations (also known as 'title tracking').

Matters that are not currently priority issues:

- scheduling of gas flows;
- the transmission service nomination cycle;
- the trading of tolerances and imbalances;
- wholesale or retail trading of gas;
- capacity booking; and
- time-of-use metering requirements.

Source: Second Options Paper, p10, table 20.

Gas Industry Co noted that outside of the options considered in the Second Options Paper we would continue to work on other aspects of balancing, such as investigating tolerances and the potential to improve balancing by allocating gas deliveries on the day after gas flow (known as 'D+1 allocation'¹⁸).

We noted that if other aspects of balancing prove to be an impediment to achieving the objectives of the Gas Act and GPS, they would be considered in future work.

Identification of reasonably practicable options

In accordance with section 43N(1)(a) of the Gas Act, Gas Industry Co must identify all reasonably practicable options for achieving the objective of the regulation. In the Second Options Paper, the following options were presented:

- Contracts based option;
- Prescriptive regulation option A;

¹⁸ A D+1 allocation process will not remove the need for a residual balancing role, even if it may reduce its size. In addition it will take some time to determine the cost and practicality of D+1 allocations, with little expectation that the process would change any conclusions in this paper.

- Prescriptive regulation option B; and
- Participative regulation option.

The options and reasons for their inclusions are discussed below.

Contracts based option

In view of improved balancing behaviour and MDL's developments of balancing arrangements, some submitters on the Options Paper suggested that a 'status quo' option allowing for continued improvement of contract based arrangements, should be considered. This option would require minimal intervention. It could be achieved largely by changes to the MPOC and Vector Transmission Code (VTC), possibly with Gas Industry Co providing facilitation, research, and analysis as required. If, on review, this approach was found not to have satisfied our regulatory objective or have met the Gas Act and GPS objectives, regulation could be introduced at that time. We called this status quo approach (that is, allowing the industry a further opportunity to develop a solution before recommending regulation) the 'contracts based option'. It recognises that, without regulatory intervention, some form of solution will emerge.

Prescriptive regulation option A

In contrast to the contracts based option is the option of regulating key features of a single balancing regime with a single Balancing Agent¹⁹ in place. Under this option, the single Balancing Agent would be appointed by and report to Gas Industry Co. Regulating the arrangements would provide more certainty that our regulatory objective would be satisfied and that Gas Act and GPS objectives would be met. A single balancing regime would integrate Maui and Vector balancing arrangements outlined in the regulations to allow for barriers to accessing balancing gas from either pipeline (or pipeline users) to be dissolved while maintaining individual allocation mechanisms. Regulations would mandate Gas Industry Co's 'in scope' features as discussed above.

¹⁹ It is possible that the Balancing Agent could be a service provider independent of any TSOs or an existing TSO.

Prescriptive regulation option B

The second prescriptive regulation option presented formalises the current balancing practice (with targeted amendments) where the MDL Commercial Operator²⁰ takes actions to balance both the Maui and Vector pipelines.

Participative regulation option

To acknowledge concerns expressed in submissions on the Options Paper about the cost and inflexibility of the regulated approach proposed in the Options Paper, we identified an option called the participative regulation option as a reasonably practicable option. It was identified as having the potential to satisfy our regulatory objective as well as to meet the Gas Act and GPS objectives at a lower cost, yet be more adaptable. This option would provide the pipeline companies with an opportunity to propose a single 'balancing policy' that meets criteria specified in regulation. The regulations would also provide deadlock breaking²¹ and single dispute resolution mechanisms. Gas Industry Co felt this option had the potential to allow for more flexibility and change than is likely to emerge from the contracts based option or the prescriptive regulation options.

Assessment of reasonably practicable options

In accordance with section 43N(1)(b) of the Gas Act, Gas Industry Co is required to assess the reasonably practicable options by considering the benefits and costs of each option and the extent to which the regulatory objective would be promoted or achieved by each option. To assess the options presented in the paper, Gas Industry Co developed a set of evaluation criteria. We consider the criteria to be a logical exposition of the Gas Act and GPS objectives in the context of managing pipeline imbalance. The criteria can be divided into three categories: efficiency, cost, and governance. The criteria are shown in the table below.²²

Table 4 Evaluation criteria

Category	Criterion	Meaning
Efficiency	Production	maximise productive efficiency
	Allocation	maximise allocative efficiency
	Security	maximise security of gas transportation
	Risks	ensure user risks are reasonable and manageable

²⁰ Under current arrangements, the MDL Commercial Operator is essentially the 'Balancing Agent' for both transmission pipelines.

²¹ Should the TSOs fail to agree on a balancing policy, Gas Industry Co will determine it.

²² For a complete explanation of the criteria and reasons for each criterion's inclusion see section 3 of the Second Options Paper available on Gas Industry Co's website.

Category	Criterion	Meaning
Cost	Agreement	minimise cost of agreeing arrangements
	Implementation	minimise cost of implementing arrangements
	Operation	minimise cost of operating arrangements
Governance	Transparency	ensure transparency and non-discrimination
	Adaptability	ensure arrangements able to adapt to future circumstances
	Enforcement	ensure effective enforcement and dispute resolution
	Balance	ensure balance between stakeholder interests
	Stability	ensure stability of regime

Source: Second Options Paper, p16, table 3.

In section 9 of the Second Options Paper, Gas Industry Co evaluated each of the options presented against each criterion presented above. A numerical score was provided to represent the anticipated performance of each option against the criterion, from 1=poor to 5=excellent. The scores were then combined using an averaging process to result in the combined results. The evaluation of each option is discussed below.

Contracts based option

The evaluation of the contracts based option displayed a wide range of results. Uncertainty about what features would be ultimately included if it were progressed was a disadvantage. In contrast, the regulated options provide more certainty given the information would be prescribed for in regulation.

The efficiency criteria rating for the contracts based option displayed a wide range of variance. This option rated best on cost as we anticipated that it would make maximum use of existing arrangements. The option ranked poorly on governance given it would not be appropriately enforced and it would remain unstable with the possibility Gas Industry Co may need to intervene.

Prescriptive regulation options A & B

As noted above, the regulated options on the whole performed better against the criteria as the details of the regime would be provided for in regulation, thus providing more certainty of the overall outcome.

For efficiency ratings, the prescriptive regulation options were indistinguishable as both would include all the features necessary to improve balancing arrangements.

A great deal of detail would need to be captured in the regulations under the prescriptive options. The costs arising from the time taken to reach agreement were evaluated as moderate, and the costs driven by the scope (ie what the agreement encompasses) were predicted to be low.

The overall rating for the implementation cost for A was given a score of 1-4, reflecting the possibility for the Balancing Agent to be a newly appointed service provider, or an existing TSO. Prescriptive regulation option B, on the other hand, scored an overall rating of three for implementation costs. This reflects the greater certainty that would stem from confirming the MDL Commercial Operator in the role of Balancing Agent.

The prescriptive options also differ slightly in their ratings for operational costs. The operational costs of the balancing mechanisms are both considered to be complex, but the difference lies in the organisational separation as with Option A there is the possibility of setting-up a new service provider.

When assessed against governance objectives, the prescriptive regulation options ranked the same for adaptability, enforcement, balance, and stability. Scoring low for adaptability, high for enforcement, and average for balance and stability. Transparency is rated 3-5 for Option A, given the possibility that a high level of transparency could result if a new service provider is confirmed.

Participative regulation option

For productive efficiency, the participative regulation option was given a score of 3-4. This reflects the fact that like the other regulated options, the participative regulation option will:

- encourage participation and competition in balancing gas;
- ensure balancing gas is only purchased when necessary; and
- ensure balancing gas is purchased from the cheapest source.

Further, we would anticipate that the balancing policy would mean that TSOs will set less conservative parameters, and therefore, the potential to maximise the use of linepack flexibility increases.

For allocative efficiency, the participative regulation option scored 3-5 as the regulations ensure:

- a common price for all equivalent gas; and
- that this price is reflected through to users.

The uncertainty lies in the balancing policy's flexibility to offer balancing gas or not, ie how open the market is.

The balancing policy will also have the ability to determine the scope of the overall outcomes for security of supply, which was rated 2-5.

When assessed against the cost objectives, the participative regulation option scored well against the cost of the agreement; however, the implementation and operational costs showed more variance, arising from the fact that Gas Industry Co, in the event TSOs were unable to reach an agreement, would need to write the balancing policy and appoint a Balancing Agent.

The participative regulation option scored well against governance objectives of adaptation, balance, and stability.

Identification of Gas Industry Co's preferred option

Given its overall superior rating and strongly superior governance rating, Gas Industry Co stated its preference for the participative regulation option.

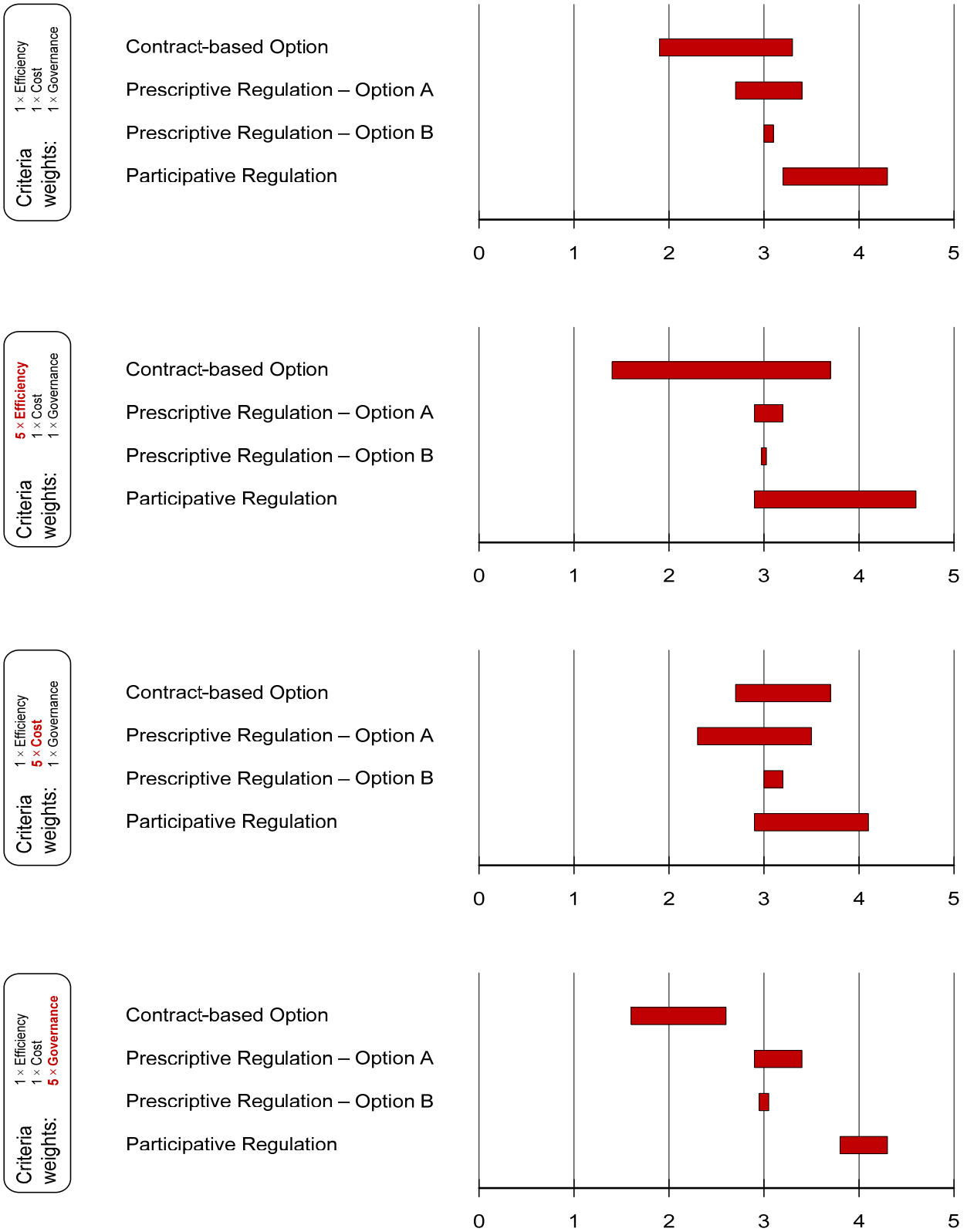
The final combined results and sensitivity analysis are shown in the tables below.

Table 5 Overall combined results

	Contracts based option		Prescriptive regulation option A		Prescriptive regulation option B		Participative regulation option	
	From	To	From	To	From	To	From	To
Productive efficiency	1	4	3	3	3	3	3	4
Allocative efficiency	1	4	3	3	3	3	3	5
Security of supply	1	4	3	3	3	3	2	5
Manageable risks	1	4	3	3	3	3	3	5
Costs of agreement	3	3	4	4	4	4	5	5
Costs of implementation	3	4	1	4	3	3	1	3
Costs of operation	4	5	1	3	2	3	2	4
Transparency	1	2	3	5	3	3	3	3
Adaptability	1	3	1	1	1	1	4	4
Enforcement and disputes resolution	2	2	5	5	5	5	5	5
Balance	1	1	3	3	3	3	5	5
Stability	2	2	3	3	3	3	4	4
Efficiency	1.0	4.0	3.0	3.0	3.0	3.0	2.8	4.8
Cost	3.3	4.0	2.0	3.7	3.0	3.3	2.7	4.0
Governance	1.4	2.0	3.0	3.4	3.0	3.0	4.2	4.2
Overall	1.9	3.3	2.7	3.4	3.0	3.1	3.2	4.3

Source: Second Options Paper, p73, table 27.

Table 6 Sensitivity analysis



Source: Second Options Paper, p74, table 28.

Analysis of submissions

The Second Options Paper contained a series of questions, to which interested parties were asked to respond. Ten submissions on the Second Options Paper were received. These submissions were analysed in Gas Industry Co's Transmission Pipeline Balancing Second Options Paper Analysis of Submissions of October 2009 (Analysis of Submissions).

Submissions were divided on how Gas Industry Co should address balancing. Vector and MDL, in particular, are not aligned. Vector is of the view that regulations should be pursued whereas MDL advocates a contracts option, with regulations being pursued in some areas if necessary.

MDL outlined a work programme to show how it would meet the intended outcomes and fulfil regulatory objectives. Many submitters believed some form of contracts based option could result in the most effective arrangements for the industry. Several noted that good industry progress was being made and that within several months improvements would be seen.

The majority of submitters agreed that the participative regulation option was reasonably practicable; however, many believed that it should only be pursued if some form of the contracts based option proved unsuccessful.

The majority of submitters also expressed concern regarding the scope of the regulatory options. In particular, submitters felt that the availability of users' information to effectively manage their positions should be addressed as well as arrangements for nominations.

In its response, Gas Industry Co acknowledged concerns regarding the proposed regulations and work programme. In order to address these, Gas Industry Co determined that a process should be facilitated to explore the possibility of the regulations being reduced to cover only those areas necessary. This led to the industry code development process, as discussed in section 5.4 being developed.

5.3 Conclusions from the consultation process

Several of the submissions received by Gas Industry Co on the Second Options Paper relayed strong messages that regulations were not warranted and that balancing arrangements should continue to take place under the current contractual arrangements. In the Second Options Paper, Gas Industry Co expressed its view on the status quo, or rather a contracts based option, including reasons why it was unlikely to work.

However, with the increased likelihood of regulations, we have noted a markedly different attitude towards progressing an industry-led solution amongst participants. Several participants noted that industry was close to agreement on a number of issues and that progress would be seen within the next few months. One company asked that industry be given an extension of three months and, if at the end of those three months, tangible progress had not been made, then it would accept a regulated solution. As noted above, in its submission, MDL outlined a work programme to show Gas

Industry Co the changes it has been progressing in order to meet balancing objectives. As noted earlier, we continue to encourage these changes; however, the changes will not achieve a unified balancing regime, which is at the core of Gas Industry Co's proposal. Appendix A of the Analysis of Submissions of the Second Options Paper contains Gas Industry Co's complete analysis of and response to MDL's proposed work programme.

On further investigation into the progress, Gas Industry Co has confirmed that work is being done that is aimed at improving current balancing arrangements. In light of this, Gas Industry Co considers that the possibility that an industry solution might emerge has become more realistic. However, the risks of this option presented in the Second Options Paper are still present, such as the inability for participants to reach agreement on issues.²³ Therefore, we have decided to propose a process aimed at minimising the scope of the rules, while targeting a more unified balancing regime. This process will differ from the contracts based option presented in Second Options Paper in that it involves Gas Industry Co assisting with the facilitation as well as decision making, whereas the outcome of the contracts based option would have been determined by the industry.

5.4 Industry Code Development process

The proposed industry code development (ICD) process will run in parallel to the continued development of balancing rules with the intention of making a recommendation to the Minister before the end of the year.

Gas Industry Co considers that a successful ICD process requires both intensive facilitated effort and the support and commitment of both TSOs and pipeline users. In order to achieve this process, Gas Industry Co has appointed an independent chair to facilitate the weekly ICD meetings.

To secure the commitment of industry participants, Gas Industry Co required each to sign a form agreeing to:

- participate in the ICD process by, as a minimum, attending half day facilitated workshops each week, starting in September 2009, until the end of the calendar year (if the objective is not achieved before then);
- accept the ICD process terms of reference; and
- contribute towards funding the process.

The terms of reference for the ICD process are described below.

²³ See section 5.4 of the Second Options Paper for the complete analysis.

ICD process terms of reference

Purpose

To provide a facilitated consultative forum at which pipeline owners, interested parties and the Gas Industry Co can design a unified balancing regime for the open access transmission system, and the means of implementing that regime. The output of the ICD process will be considered by Gas Industry Co when it makes a recommendation to the Minister by the end of 2009.

Objective

To design and implement a unified balancing regime for the New Zealand gas transmission system that will avoid or minimise the need for regulatory intervention to achieve the relevant objectives of the Gas Act and GPS.

Participation

Any organisation with an interest in transmission pipeline balancing that has signed the ICD process commitment form and paid the \$10,000 contribution can take part in the ICD process.

Gas Industry Co will decide if at any stage the process has insufficient participation to continue. Participation of both pipeline owners and a number of pipeline users will be required.

In the event of early termination of this process, Gas Industry Co will use participant contributions to defray expenses incurred to that date with respect to the process. Any surplus contributions will be returned on a pro rata basis to organisations. Any deficit will be met by Gas Industry Co.

Chair

Gas Industry Co will appoint a Chair.

The Chair will be responsible for:

- setting the agenda for meetings;
- guiding the meeting according to the agenda and time available;
- ensuring all discussion items end with a decision, action or definite outcome; and
- reviewing and approving the draft minutes before distribution.

Meetings

Meetings will be held weekly starting on Friday 18 September 2009 at Gas Industry Co's offices (unless otherwise notified by Gas Industry Co). It is expected that a minimum of nine meetings will be required.

Members of the participating organisation and/or its advisors may attend meetings.

In the event a participant is unable to attend a meeting at the Gas Industry Co's offices, the option of teleconference and/or video conferencing will be made available.

Decisions

Decisions will be made by consensus where possible, but otherwise by Gas Industry Co.

Confidentiality

No matters discussed will be confidential. However, participants may request the Chair to grant confidentiality to particular items of information.

Secretarial functions

Gas Industry Co will provide secretarial functions including:

- scheduling meetings and notifying participants;
- inviting specialists to attend meetings when required by the committee;
- preparing draft minutes; and
- circulating minutes approved by the Chair, and posting them on Gas Industry Co's website.

Work Plan

A work plan will be developed at the first meeting of participants on 18 September. It is suggested that it would need to address the following matters:

Topic	Suggested coverage
Design	Key features of Unified Balancing Regime, such as: Unified management of linepack Single Balancing Agent

Topic	Suggested coverage
	Extended nominations/virtual Welded Points Governance Transparency and accountability
Management of linepack	Thresholds – how are they determined? Tolerances - are there any and how are they determined? Balancing Agent’s instructions Curtailment - use and instructions Compressors - policies for use of Transparency - accounting and disclosure of linepack GJs & \$s
Procurement of balancing gas	Role of BGX Who is the market open to? Bids changeable up until what time?
Allocation of balancing costs	Mechanism – eg back-to-back cash-outs Pricing of gas – marginal or average cost Interaction with upstream reconciliation (title tracking) Transparency - accounting and disclosure of linepack GJs & \$s Role of Incentives pool/BPP
Information	Pipeline balance status Users balance status – D+1
Implementation	Contractual changes- MPOC/VTC System changes-OATIS, BGX, users Next steps

Possible outcomes of the ICD process

At this stage, it is too early for Gas Industry Co to predict what the outcomes of the ICD process might be. However, the outcomes may have an impact of Gas Industry Co’s recommendation to the Minister at the end of the year. In the event that the outcome substantially changes the scope or content or the proposed rules, Gas Industry Co will issue a revised statement of proposal.

Q1: Do you agree with Gas Industry Co’s decision to pursue the ICD process? If not, why?

6

Statement of proposal

Pursuant to section 43N(2)(a) of the Gas Act, this section contains details of Gas Industry Co's proposal for pipeline balancing arrangements.

6.1 Gas Industry Co's Statement of Proposal

Gas Industry Co proposes proceeding with the participative regulation option. The option was first presented in the Second Options Paper as Gas Industry Co's preferred option. The option comprises of a set of rules²⁴ for transmission pipeline balancing arrangements. The rules will provide for TSOs to jointly appoint a single Balancing Agent and develop a unified balancing plan.²⁵ The rules will establish the boundaries within which the balancing plan arrangements must lie. If TSOs are unable to agree the appointment of the Balancing Agent or the details of a balancing plan, Gas Industry Co as the Industry Body under the Gas Act, will step in to determine the outcome for both.

6.2 Reasons for the proposal

We consider that the participative regulation option will best meet the Gas Act and GPS objectives based on its overall superior rating on efficiency, cost, and governance criteria when evaluated against other options.

We also believe the participative regulation will address balancing issues that have been identified throughout the review by:

- providing for a single Balancing Agent and a unified balancing regime;
- increasing transparency of balancing actions and costs;
- ensuring the cost of a balancing action goes to the causer;
- providing for an open and competitive balancing market;

²⁴ As noted in section 3.4 we have determined that rules are more appropriate than regulations.

²⁵ Gas Industry Co has replaced the 'balancing policy' terminology used in earlier documents with 'balancing plan', since policy is established in the regulations and the 'balancing plan' only establishes how the policy will be complied with.

- allowing for the appropriate governance and dispute resolution; and
- ensuring roles and responsibilities are clear and transparent.

Feedback from submissions also indicated a wide base of industry support for the option, if a contracts based solution is not achievable.

Q2: Do you agree with Gas Industry Co's proposal to pursue the participative regulation option? If not, why?

7

Details of proposal

This section provides details of the participative regulation proposal, including details of the proposed Gas Governance (Balancing) Rules.

As noted in section 5.4, the scope and/or detail of the proposed rules may change as a result of the ICD process. If such changes are necessary, and prove to be significant, a further statement of proposal will be issued.

7.1 The proposed Gas Governance (Balancing) Rules

The purpose of the proposed rules is:

'To achieve an efficient, unified balancing arrangement for managing imbalance in the transmission system'.

The purpose is consistent with our regulatory objective.

There are four main parts to the rules and one schedule. A complete draft of the rules can be found in Appendix B. For ease, a brief description of the rules is provided in Table 7 below.

Table 7 Outline of the rules

Section of rules	Provision	Description
Part 1: General provisions	Interpretation	A listing of defined terms for the purposes of the rules.
	Users' obligations	Transmission pipeline users must use reasonable endeavours to balance within each balancing zone. If in aggregate they do not meet this obligation the Balancing Agent may take balancing action. Note that TSOs may also be pipeline users.
	TSOs' obligations	TSOs must ensure their operating procedures and contractual arrangements are consistent with and do not prevent users meeting the obligation to balance. Some of the other obligations include: providing certain information to the Balancing Agent; providing the Balancing Agent with transmission services for the transmission of balancing gas; and allowing the Balancing Agent access to information exchanges.

Section of rules	Provision	Description	
Part 2: Balancing	Balancing Agent functions	<p>The Balancing Agent’s main functions are:</p> <ul style="list-style-type: none"> • Managing the linepack of the transmission system (through buying or selling balancing gas); and • Allocating title and cost of balancing gas. <p>These functions must be carried out independently.</p>	
	Balancing market	The rules specify who the balancing market is open to; when the Balancing Agent must accept offers; when it may refuse offers; and how payment is made or received. This section also sets out the rules for transactions that occur outside the balancing market.	
	Allocation	The section requires back-to-back allocation of balancing gas. It also outlines the process for notifying TSOs of adjustments to allocations and cash-out prices of gas, and how allocation errors are handled.	
	Reporting	The Balancing Agent must, within 10 business days of the end of each month provide a written report to the industry body and to the TSOs identifying balancing actions that were taken within the month as well as any breaches that occurred.	
Part 3: Appointment of balancing agent, development of balancing plan, and funding	Subpart 1 (this subpart applies subject to subpart 2)	Appointment of balancing agent by joint transmission system owners	This section specifies the joint obligations of the TSOs to prepare a balancing plan and to appoint a Balancing Agent.
		Process for approval of balancing plan	The balancing plan approval process includes the consultation process TSOs must complete prior to submitting the plan to the industry body. If approved, the plan will be published.
		Amendment to balancing plan	This section describes how balancing plans can be amended; including which parties can propose amendments, the consultation process that must take place, and the process for approving or rejecting an amendment.
	Subpart 2: (this subpart applied subject to	Appointment of balancing agent by the industry body ²⁶	The industry body may appoint the Balancing Agent if TSOs fail to submit a draft balancing plan within 60 days of the commencement date, or if it has not been approved or if, in the industry body’s view, the Balancing Agent is failing to carry out its functions.

²⁶ The ‘industry body’ means the body approved by Order in Council under s43ZL of the Gas Act, which, at present is Gas Industry Co.

Section of rules	Provision		Description
	subpart 1)	Balancing plan	This section describes the provisions for the industry body writing a balancing plan if this subpart were to apply. It included the process for consultation and publication of the plan as well as amendments.
	Subpart 3	Funding	Describes the arrangements for funding the balancing regime under both subparts, including both development and ongoing fees.
Part 4: Miscellaneous provisions	Audit of Balancing Agent's performance		Provisions for performance audits and reviews of performance by the industry body of the Balancing Agent are outlined in this section.
	Notices		This section sets out how and when notices, both ordinary and urgent are to be given.
	Miscellaneous		This section outlines the safety override, as well as the regulations relationship with transmission system codes and the Gas Governance (Critical Contingency Management) Regulations 2008.
Schedule	Requirements for Balancing Plan		The schedule specifies what the balancing plan must contain. Including provisions for the Balancing Agent, management of linepack, the provision of information, and other processes relating to balancing gas.

Q3: Do you agree that the draft rules adequately address issues with respect to residual pipeline imbalance? If not, why?

7.2 Major operational provisions

Gas Industry Co considers that it is important participants have a clear understanding of the main operational provisions of the proposed rules. These are outlined below.

User obligations

Obligations in relation to balance

Gas Industry Co has included in the draft rules an obligation to balance. The draft rules also set out the sole consequences of a breach of this obligation to ensure the obligation does not give rise to any unintended consequences for users. This issue was discussed comprehensively in the Second Options Paper and in the Analysis of Submissions, where Gas Industry Co confirmed its position to include the obligation that users must use 'reasonable endeavours' to balance within each balancing zone.

Users include: shippers, traders, interconnected parties and TSOs. A balanced position under the draft rules for each user is defined as follows:

- In relation to a shipper, to ensure that the receipts and deliveries of gas allocated to the shipper match;
- In relation to a trader, to ensure that the same quantities of gas purchased and sold allocated to that trader match; and
- In relation to an interconnected party, to ensure that the same quantity of gas as agreed or scheduled under the terms of an interconnection agreement with the relevant TSO is taken from or injected by that party into the transmission system.

The amount by which the above amounts do not match is defined as that users' imbalance.

The definition of 'user' in the draft rules also makes it clear that the TSOs are users under two circumstances. Including:

With respect to the maintenance of the target linepack in any part of the transmission system owned by that owner. In which case its will be required to ensure actual linepack in a part of the system owned by that owner matches the aggregate of:

- The target linepack; and
- All other users' imbalances; and

- Any balancing gas allocated to the Balancing Agent.

The amount by which the actual linepack differs from aggregate of the above will be the TSO's imbalance.

With respect to its activities as a shipper, trader, or interconnected party, each TSO will have an obligation to maintain a balanced position as outlined above

If a user fails to meet its obligation to balance, it will be subject to the allocation of any balancing gas allocated to it by the Balancing Agent. The user is also liable to either pay or receive the total cash-out price of any balancing gas purchased or sold by the Balancing Agent and allocated to that user.

TSO obligations

Under the proposed rules, TSOs will have a number of obligations to fulfil in addition to their obligation as a user. For example, TSO will be required to ensure that its operating procedures and contractual arrangements are consistent with and do not unreasonably prevent users meeting their obligation to balance. TSOs will also be required to provide the Balancing Agent with transmission services for balancing gas as well as with various information to help the Balancing Agent perform its functions. Some of the information that will be required includes:

- information on the physical attributes of the pipeline;
- information to help the Balancing Agent confirm that balancing transactions have been carried out;
- metering data on the amount of gas taken/received from interconnection points and balancing zone(s); and
- general notices pursuant to transmission system codes issued by TSOs.

TSOs will also be required to cooperate and facilitate with the Balancing Agent with the view to minimise the quantity of balancing gas sold and purchased by ensuring its actions do not cause unnecessary or uncoordinated balancing actions. A requirement for TSOs to publish policies for operating compressors (including whether the Balancing Agent has access to operate them as well) as well as operational communications with the Balancing Agent has also been included in the draft rules.

The TSOs are also required to provide the Industry Body with a detailed map of the transmission system that will be consulted upon and, once verified, published.

The TSO's joint obligations in relation to the appointment of the Balancing Agent, the development of the balancing plan, and funding are discussed in sections 7.3 and 7.6 below.

Balancing Agent functions

Part two of the proposed rules outlines provisions in relation to balancing, including the functions of the Balancing Agent. The Balancing Agent is required to carry out its functions independently. That is, if the agent is commercially tied in some way to a TSO, it must operate at arm's length.

The primary function of the Balancing Agent is to manage the linepack of the transmission system by buying or selling balancing gas. Once the Balancing Agent has taken an action it will be required to allocate balancing gas and costs in accordance with the rules; and notify the relevant TSO of the necessary adjustment to reflect that allocation.

The Balancing Agent's functions in relation to managing linepack, transacting on the balancing market, and the allocation process are discussed in turn below.

Management of linepack

Under the proposed rules, the Balancing Agent will be required to take an action when linepack falls below the lower threshold or exceeds the upper threshold (both of which will be specified in the balancing plan) in a balancing zone; or if in the Balancing Agent's reasonable opinion is likely to fall below or exceed a threshold. In the event the linepack falls below, the Balancing Agent will be required to purchase balancing gas to return the linepack to the threshold. And conversely, in the event the linepack exceeds the threshold, the Balancing Agent will be required to sell balancing gas to return the linepack to the threshold. If the Balancing Agent is unable to do so, within the price thresholds specified in the balancing plan, then the TSO(s) who owns the balancing zone in question must be notified immediately.

Balancing market

The proposed rules require that the Balancing Agent purchase and sell balancing gas through a balancing gas market. The market must be open to any person who meets technical requirements as well as the terms and conditions for participating in the market.

The rules for the Balancing Agent when transacting on the market include:

- the Balancing Agent must accept offers to purchase/sell balancing gas as close as possible to the time the action occurred;

- when buying, the Balancing Agent must accept the lowest priced offers (after taking into account transmission costs, if applicable) where the price is not higher than the maximum purchase price specified in the balancing plan.
- when selling, the Balancing Agent must accept the highest price offers (after taking into account transmission costs, if applicable) where the price is not lower than the minimum purchase price specified in the balancing plan.
- the Balancing Agent must pay/accept the same clearing price from each person who comprised the balancing action.

If a situation arises where it is impractical to buy or sell through the balancing market and there are no reasonable offers, then the Balancing Agent is, once discussed and agreed upon with the Industry Body, able to use a different means to purchase balancing gas.

Allocation process

In respect of each action taken, the Balancing Agent will be required to allocate the balancing gas sold or purchased as soon as practicable after the action is taken. This allocation is to be made in accordance with the allocation model specified in the balancing plan.

The schedule of the balancing plan outlines what is required for the content of the allocation model. It requires that balancing gas is allocated to the users that have an imbalance at the time the balancing agent commits to a balancing action and in the proportions that the user's imbalance contributed to the need to take the action.

For each balancing action, the draft rules state that the Balancing Agent must notify the TSOs of any adjustments to a user's allocation. For each action, the Balancing Agent must also set the cash-out price for the balancing gas allocated to each user that reflects the clearing price or the gas plus any transmission costs incurred by in delivering or removing balancing gas to or from the reference location.²⁷ The Balancing Agent will also be required to notify users of the amount of the agent's allocation of balancing gas and its associated cost to that user.

As soon as possible after the end of each month in which a balancing action is taken, the Balancing Agent is required to issue either a credit note or invoice to affected users.

If, for some reason, the Balancing Agent is unable to allocate the balancing gas to a user, it will be required to allocate the gas to itself; and trade that gas regularly on the New Zealand Gas Exchange,

²⁷ The 'reference location' means the location or balancing zone used by the Balancing Agent to evaluate balancing gas offers for a balancing action.

or any other market readily available with a view to minimising any losses or maximising any gains in relation to gas.

The proposed rules also require that the Balancing Agent maintain a separate record containing a number of details in relation to each balancing action taken.

If a user believes it has been wrongly allocated balancing gas or costs, it will be required to advise the Balancing Agent as soon as possible. The Balancing Agent must consider the possible error and if it is found material, then it must calculate the new amount give notice to the affected users and relevant TSO(s) and issue an invoice or credit note for the amount.

Q4: Do you have any comments on the major operational provisions?

Q5: Do you agree with Gas Industry Co's decision not to include curtailment, damages and tolerances? If not, why?

7.3 The balancing plan

The provisions for developing the balancing plan and appointing the Balancing Agent are provided in part 3 of the proposed rules.

Details of the balancing plan

The proposed rules outline the parameters for the contents of the draft balancing plan. As noted earlier, the rules will also contain a schedule outlining the information that will be required in the balancing plan, which includes:

- details about the person who has been appointed Balancing Agent;
- details of the policy and process for management of linepack within a balancing zone or balancing zones including:
 - details on whether each zone is directly managed or indirectly managed (ie managed through pressure control); and
 - how TSOs set and amend target linepack²⁸ and thresholds;

²⁸ Target linepack, in relation to each balancing zone, means the target quantity of linepack for the balancing zone as specified or determined in accordance with the balancing plan.

- instructions for communication between TSOs, users, the Industry Body and the Critical Contingency Operator;
- mechanisms for the provision of information between the Balancing Agent, users, and TSOs;
- details of the policy and process for procurement of balancing gas; and
- details of the policy and process for allocation of balancing gas and balancing gas costs.

Further, the balancing plan must also:

- contain processes and procedures that support a unified regime for balancing the whole transmission system; and
- be consistent with the Critical Contingency Management Regulations, as well as the transmission system codes to the extent necessary to ensure compliance with the regulations.

Under the rules, either the TSOs develop the balancing plan and appoint the Balancing Agent, or the Industry Body does. The rules provide for three possible scenarios that could occur under part 3, these include:

- Subpart 1 applies- TSOs jointly develop the balancing plan and appoint the Balancing Agent;
- Subpart 2 applies- the Industry Body develops the plan and appoints the Balancing Agent; or
- Subpart 1 applies, then subpart 2- TSOs develop the balancing plan and appoint the Balancing Agent and at a later stage the Industry Body determines it is necessary to take over.

Each of these possibilities is discussed in turn below.

Subpart 1

The proposed rules would require that, in the first instance, the TSOs must jointly attempt to agree on a unified draft balancing plan and appoint a single Balancing Agent. If they fail to do so within 60 days of the commencement date, then subpart 2 takes effect and the Industry Body will be required to do so. Otherwise, if the TSOs reach agreement on a draft balancing plan and appointment of a Balancing Agent, they will begin consultation with stakeholders. Once consultation is complete, the final draft balancing plan is to be submitted to the Industry Body for approval.

The Industry Body will approve or not approve the initial final draft balancing plan²⁹ based on whether it is satisfied that the plan:

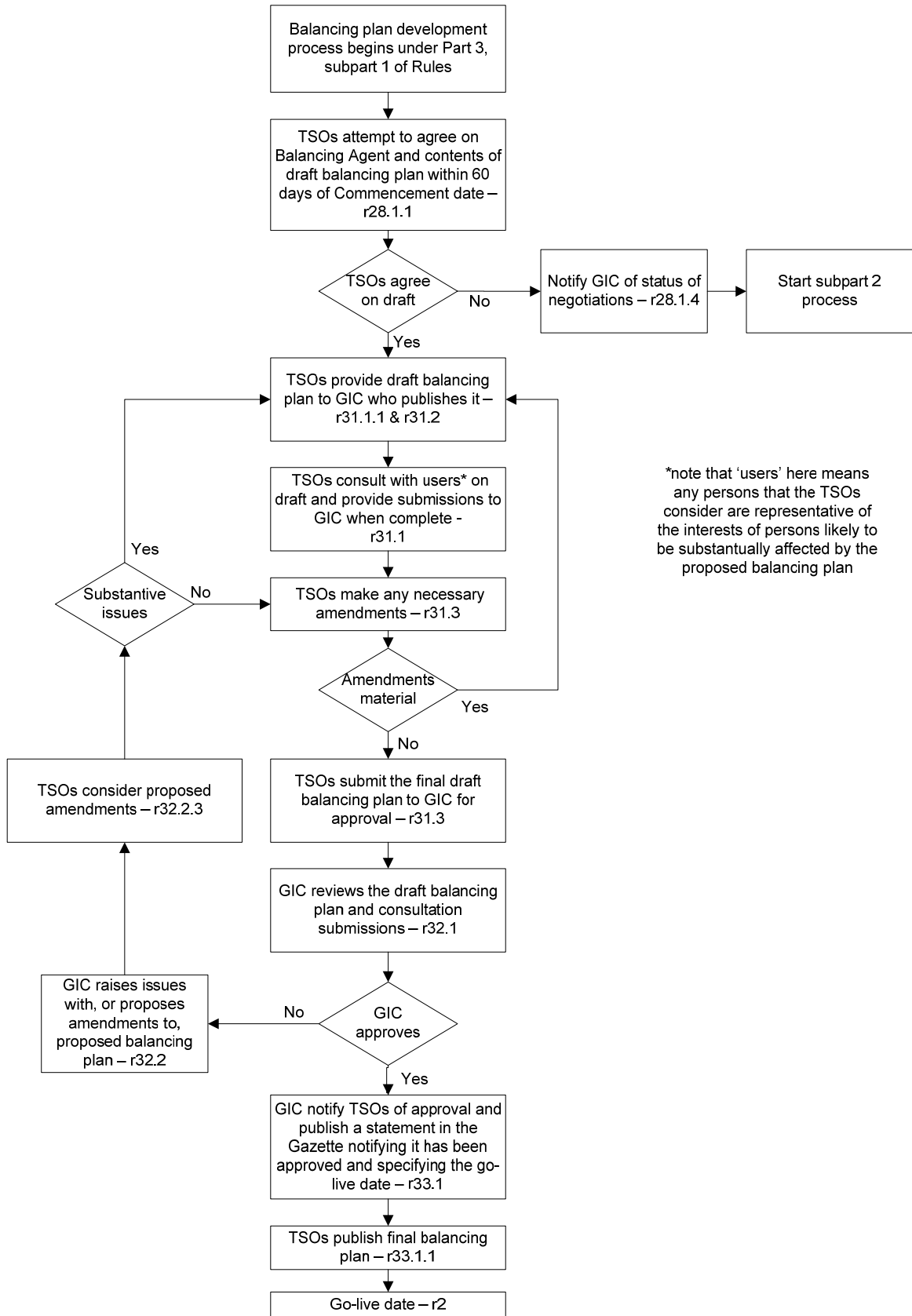
- contains all the information required by the balancing plan schedule and complies with the schedule;
- is consistent with the purpose of the rules, including containing processes and procedures that support that support a unified regime for balancing the whole transmission system;
- is consistent with the Critical Contingency Management Regulations; and
- is consistent with transmission system codes.

If the Industry Body does not approve the plan, it must give reasons and propose amendments for the TSOs to consider. If amendments are made, the plan can be resubmitted for approval.

The approval process for the initial balancing plan under subpart 1 is depicted in figure 1 below.

²⁹ The 'initial balancing plan' or the plan that takes effect on the go-live date.

Figure 1: Subpart 1: Initial balancing plan approval process

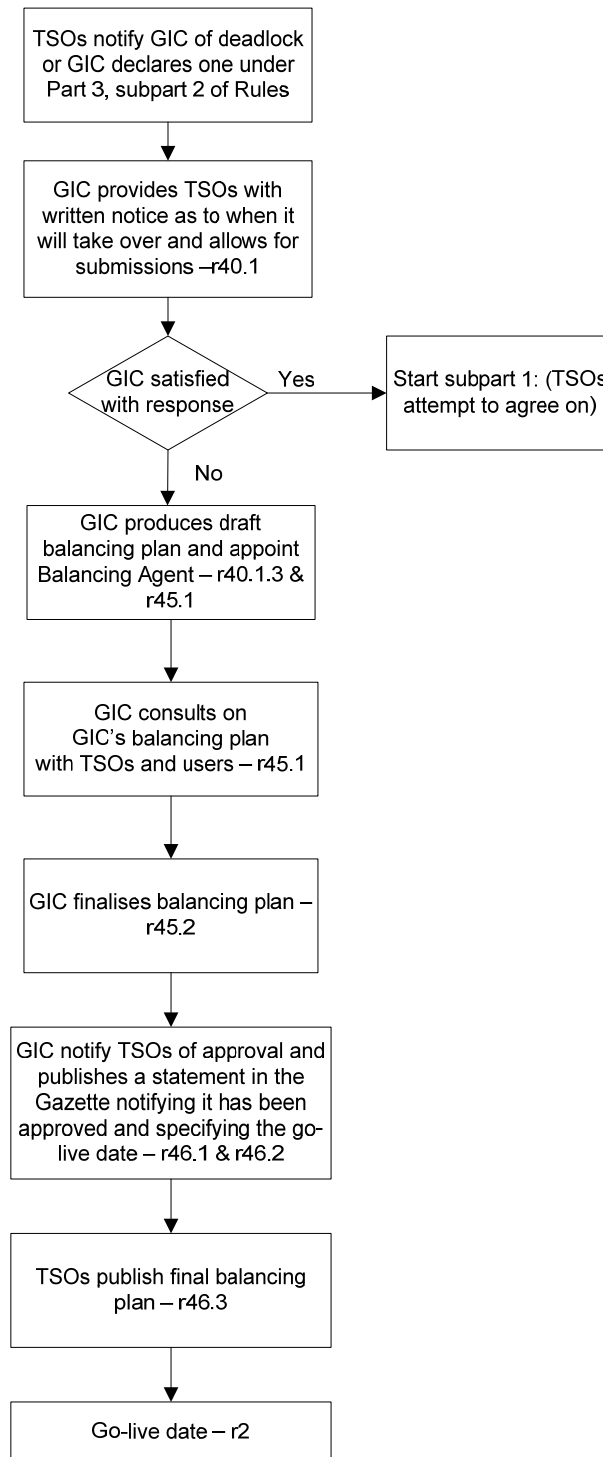


Subpart 2

If the TSOs are unable to agree on an initial draft balancing plan within 60 days of the commencement date, or if they reach deadlock at some point during the process, subpart 2 of the proposed rules will take effect. If this occurs, the proposed rules require that the Industry Body notify the TSOs in writing that from a date specified in the notice they will appoint the Balancing Agent and write the balancing plan. The takeover date specified in the notice cannot be earlier than 30 business days from the date the notice is given. The TSOs will have 15 business days to respond to the notice. Once responses are received, the Industry Body will then determine whether or not it is satisfied with the response(s) received. If it is not, it will then follow the processes for setting and approving a balancing plan and appointing a Balancing Agent. If it is satisfied with the TSOs response, the TSOs will be required to comply with rules in relation to subpart 1.

The approval process for the initial balancing plan under subpart 2 is depicted in figure below.

Figure 2 Subpart 2: Initial balancing plan approval process



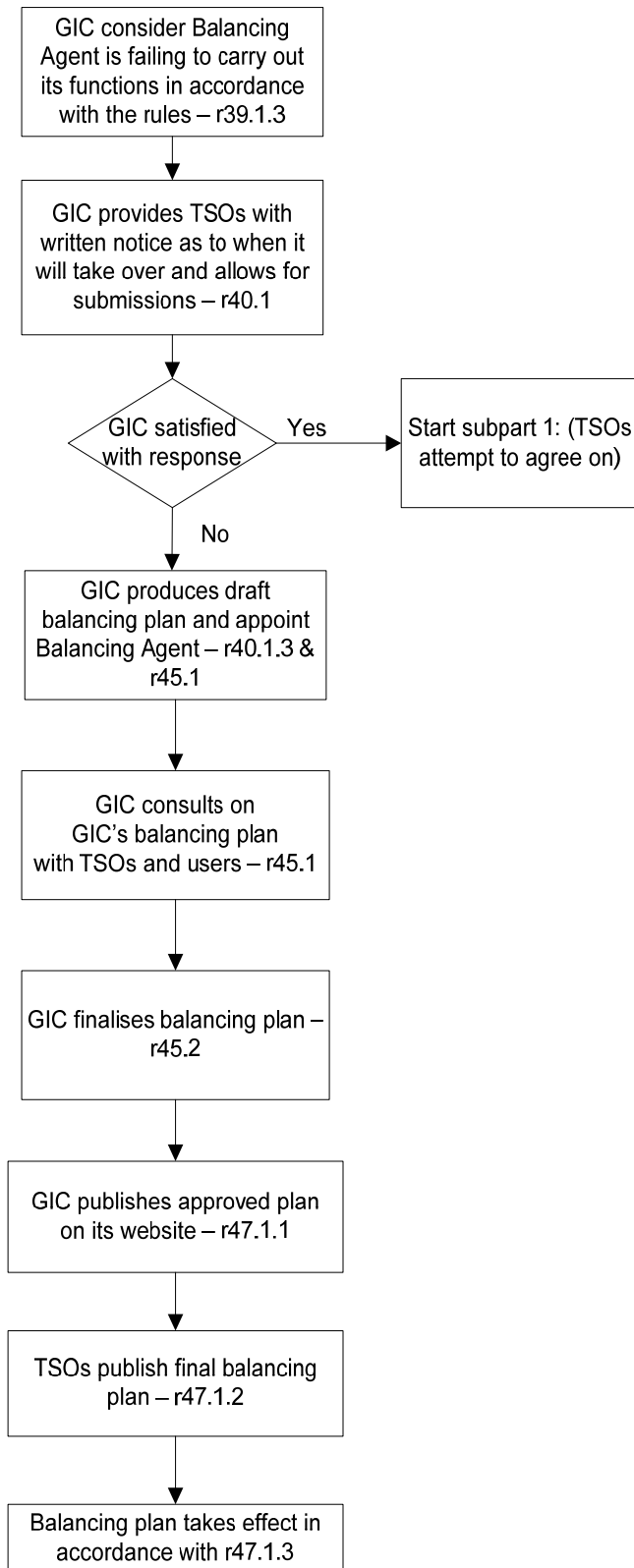
Subpart 1, then subpart 2

If Industry Body considers that the Balancing Agent is failing to perform its functions in accordance with the rules, subpart 2 under part 3 will apply.

In other words, if at some point the Industry Body determines that the Balancing Agent is failing to carry out its functions in accordance with the rules, it may terminate the Balancing Agent in its role. In this situation, subpart 2, under part 3 of the rules will apply. As notes earlier, once subpart 2 takes effect, the Industry Body is required in the first instance to give the TSOs notice of the takeover and allow TSOs to submit a response. If, after receiving the submissions, the Industry Body is still not satisfied, the Industry Body will be required to develop a new balancing plan and appoint a new Balancing Agent. The plan will come into effect in a date specified in the notice, which has to be at least 30 business days from the date of the notice. In this case, the only part of the process for setting the balancing plan under subpart 2 is when the balancing plan will take effect as the go-live date has already occurred.

The approval process for the balancing plan for this scenario is depicted in figure 3 below.

Figure 3 Subpart 2: balancing plan approval process



Amendments to the balancing plan

Amendments to the approved balancing plan developed under either subpart, can be proposed by TSOs, or the Industry Body. One or more user may also suggest an amendment of the balancing plan to the Industry Body.

If a proposed amendment is considered to be minor and technical or urgent it can be submitted directly to the Industry Body along with reasons for the amendment. The Industry Body can approve the amendment if it agrees that it is minor and technical or urgent and the amendment will take effect immediately. Urgent amendments will expire after 60 business days unless it has been consulted on and approved by the Industry Body.

All other amendments are to be submitted directly to TSOs, who will then undertake formal consultation on the amendment. If the Industry Body does not agree that the amendment is minor and technical or urgent, the amendment will need to undergo the formal consultation process.

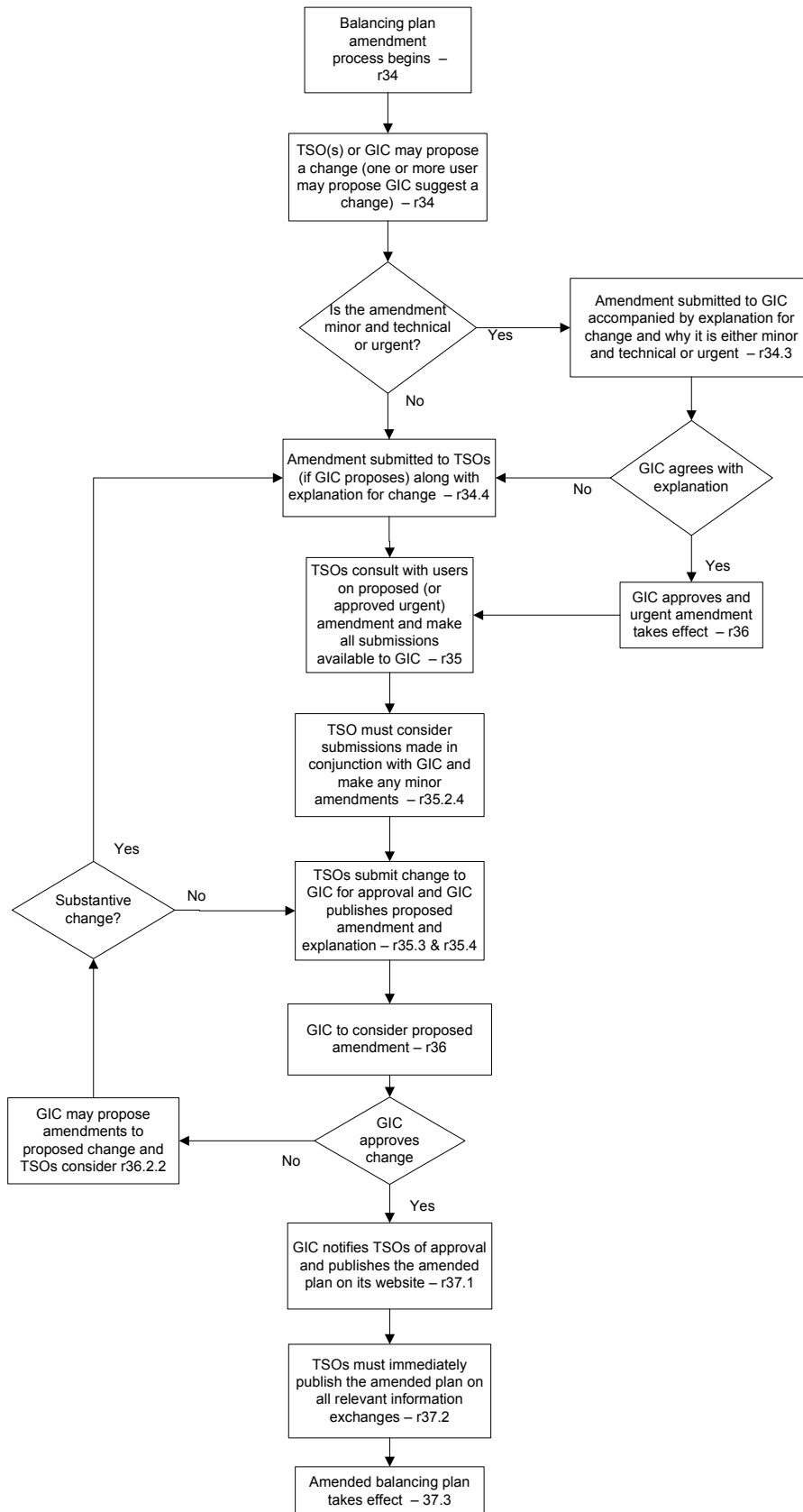
Once consultation is complete, the TSOs will provide copies of the submissions to the Industry Body, who will then determine whether or not to approve the proposed amendment. If the Industry Body does not approve the proposed amendment, it may under the proposed rules, propose amendment(s) to the proposed amendment.

Once the amendment is approved, the TSOs will be notified and the amended balancing plan published.

The balancing plan amendment process is depicted in figure 4 below³⁰.

³⁰ Note that the approval process depicted is for subpart 1, or when the TSOs develop and appoint the Balancing Agent. The process under subpart 2 is largely the same.

Figure 4 Balancing Plan amendment process



Q6: Do you agree with the details of the balancing plan? If not, why?

7.4 Industry body's responsibilities

In addition to the possibility that the Industry Body, if necessary, under the rules appoints the Balancing Agent and establishes the balancing plan, it has a number of other general oversight roles including:

- monitoring the Balancing Agent's compliance with its functions under the rules;
- managing the funding arrangements for development and ongoing costs associated with the regime;
- the possibility to undertake an audit of the Balancing Agent if necessary;
- publishing information in relation to the regime on its website; and
- the ability to approve or decline balancing plan(s) and proposed amendments.

7.5 Monitoring and enforcement

Compliance

As outlined in section 3.3, Gas Industry Co will be recommending the Compliance Regulations are amended to include the proposed balancing rules. The recommendation to include balancing rules would propose:

- an amendment to the Compliance Regulations to include references to the proposed rules, Balancing Agent, balancing gas, and users;
- a requirement that the Balancing Agent and auditors notify the Market Administrator of alleged breaches and allow the Market Administrator to request further information from the Balancing Agent; and
- include a new provision limiting the liability of the Balancing Agent.

It is intended that the recommendation to amend the Compliance Regulations would be submitted to the Minister at the same time as the recommendation for balancing rules at the end of the year. Appendix C outlines the amendments that would be included in the recommendation.

Disputes

Disputes with respect to the proposed rules (including the balancing plan) will be handled in accordance with the procedures under the Compliance Regulations. Disputes will be first classified as an 'alleged breach' which will be received by the Market Administrator. If the breach is found to be material, the alleged breach will escalate to the Investigator and, if it is unable to be settled, the alleged breach it will be settled by the Rulings Panel.³¹

Performance auditing and review

The draft rules contain a number of measures to ensure sufficient monitoring of the Balancing Agent takes place. These include:

- monthly compliance and performance reports provided by the Balancing Agent to the Industry Body;
- the ability of the Industry Body to appoint an independent auditor to carry out an audit of the Balancing Agent's performance; and
- that the Balancing Agent is held liable for any breach of its core functions under the rules that it commits.

And if the outcome of the above led to further concern, the draft rules, as discussed above, allow for the Industry Body to terminate the Balancing Agent in its role if the Balancing Agent is failing to carry out its functions in accordance with these rules.

7.6 Funding

The costs of the regime will be recovered in way that:

- reflects the current arrangements where TSOs provide and fund the balancing service; and
- is consistent with funding regimes of other gas governance arrangements, through market fees.

³¹ For more information on the compliance procedures, refer to Gas Industry Co's website.

To achieve this, there will be two types of market fees: one for the establishment of the arrangements and the other for ongoing costs associated with the rules. Both establishment and ongoing costs will be levied on the TSOs and calculated on a pro rata basis based on the amount of gas each has entering into and out of its transmission system from an interconnection point not with another TSO. It will then be at the discretion of the TSOs how they recover these costs from users.

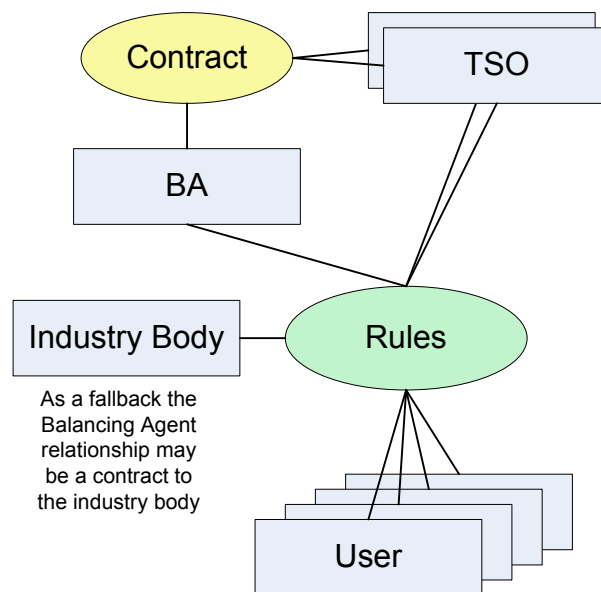
The establishment fee is a one-off fee that will be based on an initial estimate of the cost the Industry Body incurs when either assisting the TSOs in the establishment of the Balancing Agent and balancing plan, or establishing both itself. As soon as practicable after the go-live date, the Industry Body will be required to calculate the actual establishment cost and either invoice TSOs for the deficit or credit them the surplus amount.

The ongoing costs will comprise of estimated ongoing fees that will be invoiced to TSOs on a monthly basis, with the actual ongoing fees determined at the end of each year of operation and washed up, with either the over-recovered amount being returned or the under-recovered amount being invoiced.

7.7 Relationships

The relationships of the participative regulation option are depicted in figure 5 below.

Figure 5 Relationships for participative regulation option



7.8 Interaction with current industry governance arrangements

Industry codes and contracts

The proposed rules ensure that industry codes and any other contract related to the transportation of gas in the transmission system, or the determination of quantities of gas entering and leaving the

transmission system, are read subject to the rules (to the extent of any inconsistency). Therefore, compliance with the rules by allocation for balancing costs does not result in double jeopardy. It is likely that, through the development of the balancing plan and implementation of the rules, changes to existing industry arrangements will be required. At the very least, these will include code changes to both the MPOC and VTC as well system changes to OATIS.

Gas governance arrangements

It is proposed in the draft rules that the Balancing Agent will cease to carry its functions for procuring and allocating balancing gas in the event of a critical contingency event being declared under the Critical Contingency Management Regulations. If there is an inconsistency between the two sets of legislation; the Critical Contingency Management Regulations will prevail.

7.9 Amendments to the rules

Amendments to the rules will follow Gas Industry Co's 'Guidelines for the management of proposed changes to gas governance rules and regulations (the Guidelines)³². The guidelines were designed to deal with rule change proposals for the Gas (Downstream Reconciliation) Rules 2008 but are framed so that they can apply to all gas governance rules and regulations.

Proposed changes to the balancing rules would be first submitted to a register. Once a significant number of proposals have been accumulated, Gas Industry Co will begin processing the proposals by undertaking a complete consultation process and developing a statement of proposal. However, we also recognise that there may be situations where an individual change must be processed on its own.

The rules change process outlined in the Guidelines is described below.

Initiation of proposed rule changes

Proposed rule changes can be initiated in a number of ways, including:

- as an outcome of consultation processes carried out for other purposes;
- to remedy an acknowledged gap in the rules or a need to cover unanticipated circumstances;
- through a general policy review initiated by Gas Industry Co; and
- by the submission of a rule change proposal by an industry participant.

³² Available on Gas Industry Co's website.

General guidelines and constraints

Rule changes can occur only in accordance with the requirements and processes set out in the Gas Act. The proposal must be consistent with the Gas Act and the purposes of the rules and must not be unlawful.

The process for handling amendments as identified in the Guidelines is outlined below.

- Step 1: Proposal received by Gas Industry Co and assessed against the criteria set out in the Guidelines. If the proposal does not meet the criteria, the participant is advised. The proposal is placed on a rule change register in the deferred/declined category and the reasons given. If the proposal is acceptable against the criteria, the participant is advised and the proposal is placed on the rule change register for inclusion in the next package to be considered or for individual consideration if this is considered to be justified. In either case, reasons will be given.
- Step 2: Proposed rule changes may be discussed with the Ministry of Economic Development (MED) to ensure there are no higher-level issues to consider as a part of the rule change process.
- Step 3A: For rule changes other than those that are minor and do not have a substantial impact, assessment will be carried out as required by section 43N(1) of the Gas Act.
- Step 3B: A draft statement of proposal is prepared, incorporating an assessment as required by section 43(1) of the Gas Act, which is then approved by the Gas Industry Co Board and released to industry participants for consultation, in which industry participants will have the opportunity to submit on the changes outlined in the statement of proposal.
- Step 4: Usually, between two and six weeks will be allowed for submissions to be made. The shorter period will apply to proposals that accord with the criteria in the Gas Act for a simplified process to apply. Submissions will be analysed and, typically, both the analysis of submissions and the submissions will be made available to participants where there are no confidentiality or other concerns with disclosure.
- Step 5: Subject to the outcome of the consultation process, a recommendation to the Minister will be prepared for approval by the Gas Industry Co Board, and forwarded to the Minister. Gas Industry Co will publish the recommendation and the industry will be advised. The status of the rule changes concerned will be updated on the register.

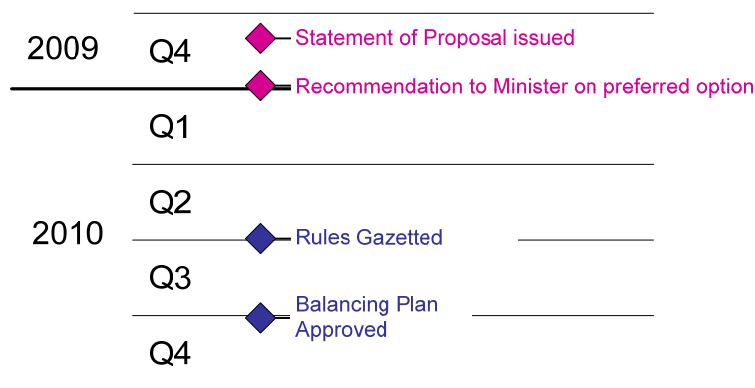
- Step 6: The Minister will consider the proposal and, in the case of rules and regulations made under s43F, the Minister has 90 days to either accept or reject the recommendation. If approved, the rule changes will be published in the *Gazette*.
- Step 7: After 28 days, the rule changes take effect.

7.10 Timeline for implementation

A timeline for implementation is illustrated below. It assumes that the rules would be gazetted mid-2010. It is possible that, as soon as this option was recommended to the Minister, TSOs could develop and consult on their balancing plan, so the balancing plan could be available for Gas Industry Co to approve as soon as the rules come into effect.

However, the timeline assumes there will be outstanding issues to resolve in relation to the plan, and that full implementation would not occur until the fourth quarter of 2010. It is also assumed that some design would be undertaken after the recommendation is made to the Minister. We anticipate that MPOC and VTC change requests would be identified and progressed prior to the rules being gazetted.

Figure 6 Timetable for implementation



Q7: Do you have any other comments on any aspects of the proposal?

8

Conclusion

Gas Industry Co's review of New Zealand transmission pipeline balancing arrangements has led it to conclude that a regulatory solution is necessary to ensure arrangements fulfil the objectives of the Gas Act and GPS, including meeting the regulatory objective:

To provide an efficient, unified balancing arrangement for managing pipeline imbalance.

The option that best meets the evaluation criteria is the participative regulation option, which was first identified in the Second Options Paper.

Through the consultation process, Gas Industry Co has also concluded that it may be possible to reduce the scope of rules if the industry can address some of the issues through contractual arrangements. To explore this possibility, Gas Industry Co is leading the ICD process. If the process is successful and the scope and/or detail of the proposed rules change significantly as a result, a further statement of proposal will be issued. Gas Industry Co will ensure participants are well informed on the progress of the ICD process.

9

Next steps

Submissions on the Statement of Proposal are due by 5pm on Friday, 30 October 2009. For more information on how to lodge a submission, please refer to section 1.3 this paper, 'Invitations for submissions'.

Gas Industry Co will endeavour to keep industry participants well informed of the progress of the ICD process, including by publishing any significant outcomes. An analysis of the submissions received on this Statement Proposal as well as a Recommendation to the Minister will be released on 21 December 2009.

Table 8 Timetable for pipeline balancing arrangements

Item	Date
Issue Second Options Paper Analysis of Submissions and Statement of Proposal	1 October 2009
Closing date for submissions on Statement of Proposal	30 October 2009
Issue Analysis of Submissions on Statement of Proposal and Recommendation to Minister	21 December 2009

Q8: Do you agree with the proposed next steps? If not, why

Appendix A Format for submissions

To assist Gas Industry Co in the orderly 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.

QUESTION	COMMENT
Q1: Do you agree with Gas Industry Co's decision to pursue the ICD process? If not, why?	
Q2 Do you agree with Gas Industry Co's proposal to pursue the participative regulation option? If not, why?	
Q3: Do you agree that the draft rules adequately address issues with respect to residual pipeline imbalance? If not, why?	
Q4: Do you have any comments on the major operational provisions?	
Q5: Do you agree with Gas Industry Co's decision not to include curtailment, damages and tolerances? If not, why?	
Q6: Do you agree with the details of the balancing plan? If not, why?	
Q7: Do you have any other comments on any aspects of the proposal?	

QUESTION	COMMENT
Q8: Do you agree with the proposed next steps? If not, why?	

Appendix B Draft balancing rules

DRAFT GAS GOVERNANCE (BALANCING) RULES

1. Title

These rules are the Gas Governance (Balancing) Rules 2009.

2. Commencement

2.1 Rules 6 to 11 and Part 2 come into force, if the industry body publishes a statement in the Gazette in accordance with rule 33.1 or 46.2, -

2.1.1 on a date that is before the 25th of the month, on the 1st day of the month following the month in which the statement is published; or

2.1.2 on a date that is the 25th, or after the 25th, of a month, on the 1st day of the 2nd month after the month in which the statement is published.

2.2 The rest of these rules come into force on the 28th day after the date of their notification in the Gazette.

3. Purpose

The purpose of these rules is to achieve an efficient, unified balancing arrangement for managing imbalance in the transmission system.

4. Outline

4.1 These rules provide for –

4.1.1 the appointment of a single balancing agent and development of a unified balancing plan (to be approved by the industry body) by transmission system owners; or

4.1.2 in certain circumstances, the appointment of a single balancing agent and development of a unified balancing plan by the industry body; and

4.1.3 the powers and functions of the balancing agent to manage linepack in the transmission system and allocate gas and costs associated with that management; and

- 4.1.4 the obligations of users and transmission system owners in relation to the balancing agent's functions.

Part 1. General provisions

5. Interpretation

- 5.1 In these rules, unless the context otherwise requires -

Act means the Gas Act 1992

allocated, in relation to a person other than the balancing agent, means allocated in accordance with the terms of a transmission system code or the Gas (Downstream Reconciliation) Rules 2008 and allocation has a corresponding meaning

balance has the meaning in rule 5.2

balancing action means one or more transactions to sell or purchase balancing gas committed at the same time for the purposes of managing linepack under regulation 15.1 or 15.2

balancing agent means—

- (a) the person appointed as the balancing agent by the transmission system owners under rule 28.1.3; or
- (b) if subpart 2 of Part 3 applies, the person appointed as the balancing agent by the industry body under rule 42

balancing gas means gas that is added to or removed from the transmission system (including through increase or reduction in output or input) for the purposes of managing linepack

balancing market means the market established or procured by the balancing agent to comply with rule 16.1

balancing plan—

- (a) means the plan –
 - (i) approved by the industry body under rule 32; or
 - (ii) if subpart 2 of Part 3 applies, set and approved by the industry body under rule 45; and,
- (b) includes any amendments to the plan approved under rule 36

balancing zone means a part of the transmission system defined as a balancing zone in the balancing plan

business day means any day of the week except—

- (a) Saturday and Sunday; and
- (b) any day that Good Friday, Easter Monday, Anzac Day, the Sovereign's birthday, Labour Day, Christmas Day, Boxing Day, New Year's Day, the day after New Year's Day, or Waitangi Day are observed for statutory holiday purposes; and
- (c) any other day that the industry body has determined not to be a business day as published by the industry body

cash-out price means the price set by the balancing agent under rule 20.1.2 for the costs associated with the sale or purchase of balancing gas

clearing price, -

- (a) in relation to the purchase of balancing gas by the balancing agent in a single balancing action, means the highest sum of–
 - (i) the offer price for any balancing gas accepted in that balancing action, plus
 - (ii) any costs of transmission of that balancing gas by the balancing agent to the reference location; and
- (b) in relation to the sale of balancing gas by the balancing agent in a single balancing action, means the lowest sum of–
 - (i) the offer price for any balancing gas accepted in that balancing action, less
 - (ii) any costs of transmission of that balancing gas by the balancing agent to the reference location.

commencement date means the date referred to in rule 2.2

cost, in relation to allocation of balancing gas cost, includes allocation of the proceeds of sale of balancing gas

directly managed, in relation to a balancing zone, means managed directly through the sale and purchase of balancing gas

go-live date means the day rules 6 to 11 and Part 2 come into force under rule 2.1

imbalance has the meaning in rule 5.2

indirectly managed, in relation to a balancing zone, means managed via management of a directly managed balancing zone, for example, by pressure regulator

information exchange means –

- (a) any online open access transmission information system that is used to facilitate information exchange in respect of access to transmission pipelines; and
- (b) includes OATIS, the online interactive open access transmission information system that is used to facilitate information exchange in respect of the open access regime under MPOC and VTC

industry body means—

- (a) the industry body approved by Order in Council under section 43ZL of the Act; or
- (b) in the event that the approval of the industry body is revoked under section 43ZM of the Act and no other industry body is approved, the Energy Commission to be established under section 43ZZH of the Act

interconnected party means any person who is a party to an interconnection agreement with a transmission system owner

interconnection agreement means any written or unwritten agreement or customary arrangement between a transmission system owner and another person relating to the injection, taking, or flow of gas into or out of the transmission system

interconnection point means any point —

- (a) where an interconnected party connects to the transmission system; or
- (b) 2 parts of the transmission system connect, as those points are identified on the map published by the industry body in accordance with rule 12

linepack means the quantity of gas in any part of the transmission system

Maui Pipeline Operating Code or MPOC means the code, issued by the owners of that part of the transmission system identified as the Maui pipeline on the map published in accordance with rule 12, covering operation of the Maui pipeline, as amended from time to time

negative imbalance means an imbalance that decreases linepack

positive imbalance means an imbalance that increases linepack

publish, in respect of information to be published by a person, means to make that information available on the person's website

reference location means the location or balancing zone used by the balancing agent to evaluate balancing gas offers for a balancing action

shipper means a person who is a party to an agreement with a transmission system owner to have gas transported through all or part of the transmission system

target linepack, in relation to a balancing zone, means the target quantity of linepack for the balancing zone as specified in or determined in accordance with the balancing plan

trader means a person who buys or sells gas within the transmission system

transmission system code means the rules of access to and use of a part of the transmission system, and includes MPOC and VTC

transmission system means the system of interconnected high pressure open access gas transmission pipelines depicted on the map published by the industry body in accordance with rule 12

transmission system owner means a person who owns all or any part of the transmission system

user –

(a) means –

(i) a shipper, or

(ii) a trader; or

(iii) an interconnected party; or

(iv) a transmission system owner in relation to –

(A) maintenance of the target linepack in any part of the transmission system owned by that owner; and

(B) its activities as a shipper, trader, or interconnected party; and

(b) does not include the balancing agent in relation to the performance of the agent's functions.

Vector Transmission Code or VTC means the code, issued by the owners of that part of the transmission system identified as the Vector pipeline on the map published in accordance with rule 12, covering operation of the Vector pipeline, as amended from time to time.

5.2 For the purposes of these rules,

balance means –

(a) in relation to a shipper, to ensure that the receipts and deliveries of gas allocated to the shipper match; and

(b) in relation to a trader, to ensure that the quantities of gas purchased and sold allocated to the trader match; and

(c) in relation to an interconnected party, to ensure that the same quantity of gas as agreed or scheduled under the terms of an interconnection agreement with the relevant transmission system owner is taken from or injected by that party into the transmission system; and

(d) in relation to a transmission system owner (other than in regard to its activities as a shipper, trader, or interconnected party), to ensure that the actual linepack in a part of the transmission system owned by that owner matches the aggregate of -

(i) the target linepack; and

(ii) all other users' imbalances; and

(iii) any balancing gas allocated to the balancing agent under rule 19.3

imbalance –

in relation to -

- (i) a shipper, means the amount by which receipts and deliveries of gas allocated to the shipper do not match; and
 - (ii) a trader, means the amount by which the quantities of gas purchased and sold allocated to the trader do not match; and
 - (iii) an interconnected party, means the amount by which the quantity of gas taken from or injected into the transmission system by that party differs from that agreed or scheduled under the terms of an interconnection agreement; and
 - (iv) a transmission system owner (other than in regard to its activities as a shipper, trader, or interconnected party), means the amount by which the actual linepack of a part of the transmission system owned by that person differs from the aggregate of:
 - (A) the target linepack of that part of the system; and
 - (B) all other users' imbalances in that part; and
 - (C) any balancing gas allocated to the balancing agent under rule 19.3; and
 - (v) a balancing zone, means the aggregate imbalance of all users in that zone; and
- (b) includes -
- (i) a positive imbalance; and
 - (ii) a negative imbalance.

Users' obligations

6. Users' obligation in relation to balancing

6.1 Subject to rule 6.4, a **user** must use reasonable endeavours –

6.1.1 to **balance** within each **balancing zone**; or

6.1.2 if, despite paragraph (a), the **user** has an **imbalance** in any **balancing zone**, to return the **user's imbalance** to zero.

6.2 Despite rule 6.1, if a **user** has an **imbalance** in any **balancing zone** –

6.2.1 the allocation of gas in the **transmission system** to the **user** is subject to adjustment to reflect any allocation of **balancing gas** by the **balancing agent**; and

6.2.2 the **user** is –

- (a) liable to pay the total **cash-out price** of any **balancing gas** purchased by the **balancing agent** and **allocated** to the **user** in accordance with these rules; or
- (b) entitled to receive the total **cash-out price** for any **balancing gas** sold by the **balancing agent** and **allocated** to the **user** in accordance with these rules.

6.3 To avoid doubt, -

6.3.1 a **transmission system owner** is only required to ensure that the actual **linepack** matches the **target linepack**, other **users' imbalances**, and any **balancing gas allocated** to the **balancing agent** under rule 19.3 in a part of the **transmission system** owned by that **transmission system owner**; and

6.3.2 if 2 or more **transmission system owners** own a **balancing zone**, they are –

- (a) jointly responsible to use reasonable endeavours to **balance** within that **balancing zone**; and
- (b) jointly liable or entitled, as the case may be, to be **allocated balancing gas** by the **balancing agent**; and
- (c) jointly liable to pay or entitled to receive the **cash-out price** of any **balancing gas allocated** to them.

6.4 This rule does not apply during any period where a critical contingency has been declared and not terminated under the Gas Governance (Critical Contingency) Regulations 2008.

7. Users' obligation to provide information

7.1 A **user** must provide such information to the **balancing agent** as is necessary to enable the agent to carry out its functions.

Transmission system owners' obligations

8. Transmission system owners' obligation to facilitate balancing

8.1 Each **transmission system owner** must ensure that its operating procedures and contractual arrangements are consistent with and do not unreasonably prevent **users** meeting the obligation to **balance** in rule 6.

9. Transmission system owners to provide transmission system information

- 9.1 Each **transmission system owner** must ensure that, if required by the **balancing agent**, any of the following information is made available to the **balancing agent** in relation to any of the owner's parts of the **transmission system**, whether via an **information exchange** or otherwise:
- 9.1.1 information about the threshold(s) specified in the **transmission system owner's** critical contingency management plan under the Gas Governance (Critical Contingency Management) Regulations 2008:
 - 9.1.2 information about **linepack**:
 - 9.1.3 information about the pressure at each of the measurement points specified in the **balancing plan**:
 - 9.1.4 information necessary to confirm that **balancing gas** transactions have been carried out:
 - 9.1.5 information about the **imbalance** in each **balancing zone** with a breakdown of the **imbalance** per **user** (in sufficient detail to enable the **balancing agent** to **allocate balancing gas** and **cost** under these rules):
 - 9.1.6 historical **imbalance**, **linepack**, or pressure data:
 - 9.1.7 metering (or other equipment) data on the amount of gas received into or taken from –
 - (a) each **interconnection point**; and
 - (b) each **balancing zone** (if there is no **interconnection point** between the zones):
 - 9.1.8 the quantity of gas agreed between the **transmission system owner** and an **interconnected party**, or otherwise expected or scheduled, to pass–
 - (a) through each interconnection point; and
 - (b) between each **balancing zone** (if there is no **interconnection point** between the zones):
 - 9.1.9 any notices issued in accordance with a **transmission system code** by the **transmission system owner**:
 - 9.1.10 any other information reasonably requested by the **balancing agent** for the purpose of carrying out its functions under these rules.
- 9.2 The information described in this rule must be the best information available (including real time information if applicable) that, in the particular circumstances, is in the

transmission system owner's possession or can be obtained or derived without unreasonable difficulty or expense.

10. Transmission system owners to provide transmission services for balancing gas

10.1 Each **transmission system owner** must provide the **balancing agent** with transmission services for the transmission of **balancing gas** on the following terms and conditions:

10.1.1 fully variable pricing:

10.1.2 priority to pipeline capacity not already committed, (for example, to approved nominations):

10.1.3 no profile limits, (which includes no maximum daily or hourly quantity limits).

11. Other obligations of transmission system owners in relation to balancing

11.1 Each **transmission system owner** must –

11.1.1 cooperate with and facilitate the **balancing agent** in the performance of the agent's functions with a view to minimising the quantity of **balancing gas** sold and purchased through **balancing actions**, and in particular by ensuring that none of the following actions by the **transmission system owner** cause unnecessary or uncoordinated **balancing actions** –

(a) operation of compressors:

(b) use of curtailment:

(c) intervention for safety or maintenance; and

11.1.2 give access to the **balancing agent** to any **information exchange** provided by the **transmission system owner** on reasonable terms and conditions; and

11.1.3 ensure **users'** allocations of gas are adjusted to reflect allocations made by the **balancing agent** under rule 19; and

11.1.4 publish –

(a) its compressor operation policy; and

(b) any written operational communications between the **transmission system owner** and the **balancing agent** that impact on how the **balancing agent** carries out its functions.

11.2 A **transmission system owner** may give the **balancing agent** the right to control any compressor to assist in the **balancing agent** carrying out its functions.

11.3 Nothing in this rule requires a **transmission system owner** to take an action that would unreasonably interfere with the transmission of gas in a part of the **transmission system**.

12. Publication of transmission system

- 12.1 No later than 5 **business days** after the **commencement date**, each person who owns any part of New Zealand's system of interconnected high pressure open access gas transmission pipelines must provide the **industry body** with the information specified in clause 1(2) of Part 5 of Schedule 1 of the Gas (Information Disclosure) Regulations 1997.
- 12.2 As soon as practicable after receiving the information described in rule 12.1, the **industry body** must consult with the persons who have submitted the information on a draft map depicting the **transmission system** for the purposes of these rules.
- 12.3 As soon as practicable after that consultation and no later than the **go-live date**, the **industry body** must **publish** a map depicting the **transmission system**.
- 12.4 A **transmission system owner** must give notice to the **industry body** of any error or change in the boundaries of, and pipelines comprising, the **transmission system owner's** part of the **transmission system** as soon as practicable after becoming aware of the error or change.
- 12.5 The **industry body** may amend or update the boundaries of, and pipelines comprising, the **transmission system** in response to any notice given by a **transmission system owner** under rule 12.4 and, where applicable, must **publish** an updated map depicting the **transmission system**.

Part 2. Balancing

Balancing agent functions

13. Functions of the balancing agent

13.1 The primary functions of the **balancing agent** are to –

13.1.1 manage the **linepack** of the **transmission system** by –

- (a) buying or selling **balancing gas** to manage **linepack** in **balancing zones** that are **directly managed**; or
- (b) taking any other action provided for in the **balancing plan**, to **indirectly manage linepack** in **balancing zones** that are not **directly managed**; and

- 13.1.2 enter into transmission agreements in relation to the transmission of **balancing gas** to and from the **reference location**; and
- 13.1.3 **allocate balancing gas** and **cost** associated with each **balancing** action taken by the **balancing agent** in accordance with this Part; and
- 13.1.4 notify the relevant **transmission system owner** of any adjustments required to be made to **users'** allocations of gas in the **transmission system** to reflect allocation of **balancing gas** by the **balancing agent** in accordance with this Part.

14. Functions to be carried out independently

- 14.1 The **balancing agent** must carry out its functions under these rules-
 - 14.1.1 independently of any other functions carried out by that person; and
 - 14.1.2 if the agent is, or is related to, a **user** or **transmission system owner**, at arm's length from the other business operated by that **user** or **transmission system owner**.
- 14.2 The **balancing agent** must use information provided to it under these rules only for the purpose of performing its functions under these rules.

15. Management of linepack

- 15.1 If the **linepack** of a **balancing zone** that is **directly managed** falls below, or in the **balancing agent's** reasonable opinion is likely if **balancing action** is not taken to fall below, the lower threshold specified in the **balancing plan** for the zone, the **balancing agent** must-
 - 15.1.1 endeavour to purchase sufficient gas to return the **linepack** to the threshold; and
 - 15.1.2 if necessary, ensure that the **balancing gas** purchased is transmitted to the relevant **balancing zone**.
- 15.2 If the **linepack** of a **balancing zone** that is **directly managed** exceeds, or in the **balancing agent's** reasonable opinion is likely if **balancing action** is not taken to exceed, the upper threshold specified in the **balancing plan** for the zone, the **balancing agent** must-
 - 15.2.1 endeavour to sell sufficient gas to return the **linepack** to the threshold; and
 - 15.2.2 if necessary, ensure that the **balancing gas** sold is transmitted from the relevant **balancing zone**.

- 15.3 If there is insufficient gas available for sale and purchase within the price thresholds specified in the **balancing plan** to return the **linepack** in a **balancing zone** to the relevant threshold, then the **balancing agent** must immediately notify the **transmission system owner** or owners who own the **balancing zone**.

Balancing market

16. Rules for transactions relating to balancing gas market

- 16.1 The **balancing agent** must establish or procure the services of a market for buying and selling **balancing gas**.
- 16.2 The **balancing market** must be open to any person who –
- 16.2.1 has gas available for sale, or who wishes to purchase gas, no matter where on the **transmission system** the gas is available or where on the **transmission system** the person wishes to take the gas from, so long as the gas is able to be transported to or from the required **balancing zone**; and
 - 16.2.2 meets any technical requirements relating to procurement of **balancing gas** specified in the **balancing plan**; and
 - 16.2.3 meets and agrees to be bound by the reasonable terms and conditions for the sale and purchase of **balancing gas published** by the **balancing agent** under rule 18.
- 16.3 Subject to rule 17, the **balancing agent** must purchase or sell **balancing gas** through the **balancing market**.
- 16.4 Subject to rule 16.6, when purchasing **balancing gas** through the **balancing market** the **balancing agent** must –
- 16.4.1 accept offers to sell gas, or changes to offers to sell gas, as close as is reasonably practicable to the time of the **balancing action**; and
 - 16.4.2 accept the lowest priced offer or, if necessary, offers available, (where the offer price is first increased by any costs of transmission that will be incurred by the **balancing agent** in the course of transmission of the gas to the **reference location**); and
 - 16.4.3 pay the same **clearing price** to each person whose offer to sell gas is fully or partially accepted as part of a single **balancing action**, less any costs incurred by the **balancing agent** for transmission of that gas to the **reference location**.
- 16.5 Subject to rule 16.6, when selling **balancing gas** through the **balancing market** the **balancing agent** must –

16.5.1 accept offers to purchase gas, or changes to offers to purchase gas, as close as is reasonably practicable to the time of the **balancing action**; and

16.5.2 accept the highest priced offer or, if necessary, offers available, (where the offer price is first decreased by any costs of transmission that will be incurred by the **balancing agent** in the course of transmission of the gas to the **reference location**); and

16.5.3 receive the same **clearing price** from each person whose offer to purchase gas is fully or partially accepted as part of a single **balancing action**, plus any costs of transmission incurred by the **balancing agent** for transmission of that gas from the **reference location**.

16.6 The **balancing agent** must not accept any offer to sell or purchase **balancing gas** where the resulting **clearing price** would be, -

16.6.1 in the case of purchase of gas, higher than the maximum purchase price specified in the **balancing plan**; or

16.6.2 in the case of sale of gas, lower than the minimum sale price specified in the **balancing plan**.

17. Rules for transactions outside balancing gas market

17.1 The **balancing agent** may sell or purchase **balancing gas** other than through the **balancing market** if the **industry body** has given notice to the **balancing agent** that in its opinion the **balancing market** is not meeting the purpose of these rules.

17.2 If rule 17.1 applies, the **balancing agent** must agree with the **industry body** how the **balancing agent** will purchase and sell **balancing gas** until the **balancing market** meets the purpose of these rules, at which point the **balancing agent** must purchase or sell **balancing gas** through the **balancing market**, until given a further notice by the **industry body** under rule 17.1.

18. Terms of balancing gas transactions

18.1 The **balancing agent** must **publish** the terms and conditions on which it will purchase or sell **balancing gas**, which must –

18.1.1 be consistent with the intent of rule 16.2 and 16.3 to allow the **balancing market** to be as inclusive as possible; and

18.1.2 reflect reasonable commercial practice.

Allocation

19. Rules for allocation of balancing gas

19.1 The **balancing agent** must in respect of each **balancing action** taken by the agent, **allocate** the **balancing gas** sold or purchased and the associated **costs** of that gas to **users**–

19.1.1 in accordance with the allocation model specified in the **balancing plan**; and

19.1.2 as soon as practicable after the taking of the **balancing action**.

19.2 In applying the allocation model, the **balancing agent** must have regard to the best information available.

19.3 In the event that the **balancing agent** is unable to **allocate** any **balancing gas** to a **user** under the allocation model the **balancing agent** must **allocate** the unallocated **balancing gas** to itself.

20. Notification of adjustments to allocations and cash-out price of balancing gas

20.1 As soon as practicable after allocating **balancing gas** in respect of a **balancing action**, the **balancing agent** must –

20.1.1 notify the **transmission system owners** of any adjustments to be made to **users'** allocations to reflect the **balancing agent's** allocation of the gas (including allocation of **balancing gas** to the **balancing agent** under rule 19.3); and

20.1.2 set a **cash-out price** for the **balancing gas allocated** to each **user** which –

(a) in relation to the purchase of **balancing gas**, is the sum of–

(i) the **clearing price** for the gas; and

(ii) any transmission costs incurred by the **balancing agent** in delivering the **balancing gas** from the **reference location** to the location of the **user's imbalance**, and

(b) in relation to the sale of **balancing gas**, is the sum of–

(i) the **clearing price** for the gas; and

(ii) any transmission costs incurred by the **balancing agent** in removing the **balancing gas** from the location of the **user's imbalance** to the **reference location**, and

(c) does not include any allowance for –

- (i) the overheads or other fixed costs of the **balancing agent**; or
- (ii) profit; and

20.1.3 notify affected **users** of the amount of the agent's allocation of **balancing gas** and its associated **cost** to that **user**.

21. Payment for balancing gas purchased

21.1 Subject to rule 22.3, as soon as possible after the end of each month in which **balancing gas** is purchased (the **balancing action** month), the **balancing agent** must issue an invoice to each affected **user** for the total cost of **balancing gas** purchased that was **allocated** to the affected **user** during or in respect of the **balancing action** month.

21.2 Each affected **user** must pay the amount stated in the invoice to the **balancing agent** –

21.2.1 if the invoice is received before the 10th of the month, no later than the 20th of the month in which the invoice was issued; or

21.2.2 if the invoice is received on or after the 10th of the month, no later than 10 days after the invoice was received.

22. Payment of proceeds of sales of balancing gas

22.1 Subject to rule 22.3, as soon as possible after the end of each month in which **balancing gas** is sold (the **balancing action** month), the **balancing agent** must issue a credit note to each affected **user** for the total **cost** of **balancing gas** sold that was **allocated** to the affected **user** during or in respect of the **balancing action** month.

22.2 The **balancing agent** must pay each affected **user** the amount stated in the credit note no later than the 20th of the month following the month in which the credit note was issued.

22.3 Despite anything in this rule or rule 21, the **balancing agent** may issue an invoice or credit note under this rule or rule 21 that is for the net **cost** that has been **allocated** to the affected **user** in relation to **balancing gas** purchased or sold.

23. Balancing agent must regularly settle any balancing gas allocated to the balancing agent

23.1 The **balancing agent** must –

23.1.1 keep a separate record of any **balancing gas allocated** to itself under rule 19.3; and

23.1.2 trade that gas regularly on the New Zealand Gas Exchange, or any other market, with a view to minimising any losses or maximising any gains in relation to the gas.

24. Records of transactions

24.1 The **balancing agent** must maintain a separate record -

24.1.1 in relation to each **balancing gas** transaction of -

- (a) the offer and final prices;
- (b) the quantity;
- (c) the counterparty
- (d) the transmission cost (if any); and
- (e) the **balancing action** with which the transaction is associated; and

24.1.2 in relation to each **balancing action** of –

- (a) the commitment time;
- (b) the **clearing price**;
- (c) the total quantity of **balancing gas** purchased or sold; and
- (d) the allocation of **balancing gas** quantity and associated **cash-out price** to each **user** to whom **balancing gas** and **cost** is **allocated**; and

24.1.3 of any other details of the transactions associated with **balancing actions** that the **balancing agent** considers desirable.

24.2 The **balancing agent** must **publish** in respect of each **balancing action** taken, -

24.2.1 the total quantity of **balancing gas** procured; and

24.2.2 the **clearing price** for the gas; and

24.2.3 details of any **balancing gas allocated** to the **balancing agent** under rule 19.3; and

24.2.4 details of the settlement by the **balancing agent** of the accumulated **balance of balancing gas allocated** to the agent under rule 19.3 and the loss or gains made; and

24.2.5 the tariff for any **balancing gas** transmission services used by the **balancing agent**.

24.3 The **balancing agent** must keep the records referred to in rule 24.1 for at least 5 years following the relevant **balancing action**.

25. Errors in allocations

- 25.1 If a **user** who has been **allocated balancing gas** or **costs** associated with **balancing gas** under rules 19 and 20 considers that the allocation of gas or **costs** was calculated in error, the person must advise the **balancing agent** of the error as soon as possible.
- 25.2 If the **balancing agent** considers that an error has occurred and has resulted in a materially different allocation of **balancing gas** or **cost** than would have resulted had the error not occurred, the **balancing agent**–
- 25.2.1 must assess the difference between the amount of **balancing gas** and cost **allocated**, and the amount that should have been **allocated** and must make a new allocation of **balancing gas** and cost that reflects the difference between the two amounts; and
- 25.2.2 must give notice of the error and the new allocation to -
- (a) affected **users**; and
 - (b) the relevant **transmission system owner** or owners; and
- 25.2.3 if an invoice or credit note has already been issued in relation to the original allocation of **cost**, the **cost** associated with the new allocation must be included in the next invoice or credit notice sent to the affected **users**.
- 25.3 A **transmission system owner** who is notified under rule 25.2 of a new allocation, must ensure the affected **users**' allocations of gas are adjusted to reflect the new allocation.
- 25.4 The **balancing agent** –
- 25.4.1 must make a decision in relation to any errors advised to it within 12 months of the advice; and
- 25.4.2 may not make a new allocation of **balancing gas** and **cost** under rule 25.2 unless the **balancing agent** has received notification of the error within 6 months after the date of notification of the allocation to **users** under rule 20.1.3.

Reporting

26. Monthly reports

- 26.1 The **balancing agent** must, within 10 **business days** of the end of each month, provide a written report to the **industry body** and to the **transmission system owners** that sets out the following information -
- 26.1.1 a summary of the information referred to in rule 24.2 for the month; and

26.1.2 any breaches of these rules by the **balancing agent** or any other person of which the **balancing agent** is aware at the date of the report and which have not previously been notified in a report.

26.2 The **industry body** may **publish** the information in the monthly report that is provided under rule 26.1.1 and such information that is provided under rule 26.1.2 as in its opinion is desirable.

Part 3. Appointment of balancing agent, development of balancing plan, and funding

Subpart 1

Appointment of balancing agent by joint transmission system owners

27. Application of subpart

27.1 This subpart applies subject to subpart 2.

28. Joint obligations of transmission system owners in relation to appointment of balancing agent and preparation of balancing plan

28.1 If this subpart applies, all **transmission system owners** must together –

28.1.1 attempt to agree on –

- (a) the identity of a person to act as the **balancing agent** under these rules; and
- (b) the contents of a draft balancing plan; and

28.1.2 if they agree on the identity of a **balancing agent** and on a draft balancing plan, consult upon and seek approval of that plan from the **industry body** in accordance with the procedure in rule 31; and

28.1.3 if the **balancing plan** is approved by the **industry body** under rule 32, appoint the person named in the **balancing plan** to act as the **balancing agent** for the purposes of these rules; and

28.1.4 if they cannot agree on the identity of a **balancing agent** or on a draft balancing plan within 60 **business days** from the **commencement date**, notify the **industry body** accordingly, (providing, if relevant, further information about the status of their negotiations).

28.2 If the **transmission system owners** have appointed a **balancing agent** and the **industry body** has approved a **balancing plan** under rule 32 then, subject to rule 41,

the **transmission system owners** must ensure that there remains at all times a **balancing agent** appointed by the **transmission system owners**.

29. Terms of appointment of balancing agent

29.1 The terms and conditions of appointment of a **balancing agent** by the **transmission system owners** may provide for -

29.1.1 reasonable remuneration to be paid to the **balancing agent** by the **transmission system owners**; and

29.1.2 an indemnity by the **transmission system owners** of any costs incurred by the **balancing agent** that are unable to be recovered from –

(a) **users** under rule 6.2.2(a); or

(b) contracting parties in relation to the purchase and sale of **balancing gas**; and

29.1.3 the profits or loss on trading of gas under rule 23 to be passed on to or indemnified by the **transmission system owners**; and

29.1.4 any other terms and conditions not inconsistent with these rules.

29.2 The **transmission system owners** must publish -

29.2.1 the terms and conditions of appointment of any **balancing agent** appointed by them; and

29.2.2 any amendments to or replacement terms and conditions of appointment of any **balancing agent** appointed by them.

29.3 To avoid doubt, only one person must be appointed as **balancing agent** in respect of the whole **transmission system**.

30. Contents of draft balancing plan

30.1 The draft balancing plan must –

30.1.1 contain all the information required by the Schedule; and

30.1.2 comply with the requirements in the Schedule; and

30.1.3 be consistent with the purpose of these rules, including by containing processes and procedures that support a unified regime for **balancing** the whole **transmission system**; and

30.1.4 be consistent with the Gas Governance (Critical Contingency Management) Regulations 2008; and

30.1.5 be consistent with **MPOC**, **VTC**, or any other **transmission system code** except to the extent necessary to comply with these rules.

Process for approval of Balancing plan

31. Procedure for approval of balancing plan

31.1 If the **transmission system owners** agree on a draft balancing plan, the owners must -

31.1.1 provide a copy of the draft balancing plan to the **industry body**; and

31.1.2 consult on the draft balancing plan with persons that the **transmission system owners** consider are representative of the interests of persons likely to be substantially affected by the draft balancing plan; and

31.1.3 give persons consulted with under rule 31.1.2 at least 20 **business days** to make submissions to the **transmission system owners** on the draft balancing plan; and

31.1.4 provide copies of the submissions to the **industry body** as soon as practicable after those submissions have been received.

31.2 The **industry body** must **publish** the draft balancing plan.

31.3 After the consultation required by rule 33.1, the **transmission system owners** may amend the draft balancing plan and –

31.3.1 if the amendments do not materially impact on the contents of the **balancing plan**, may submit a proposed final **balancing plan** to the **industry body** for approval; or

31.3.2 if the amendments materially impact on the contents of the plan, must produce a new draft balancing plan, provide it to the **industry body**, and consult on it again in accordance with rule 33.1, (however, in this circumstance, the minimum number of days for the making of submissions is 10 **business days**).

31.4 Rule 31.2 and this rule apply with any necessary modifications to a new draft balancing plan.

32. Approval of balancing plan

32.1 The **industry body** must approve the proposed **balancing plan** submitted under rule 31.3.1 if it is satisfied that it meets the requirements of rule 30.

- 32.2** If the **industry body** declines to approve the proposed **balancing plan** –
- 32.2.1** it must give reasons; and
 - 32.2.2** it may propose amendments to the plan; and
 - 32.2.3** the **transmission system owners** must consider the reasons and any proposed amendments and may amend the proposed **balancing plan**, and –
 - (a) if the amendments do not materially impact on the contents of the plan, may resubmit the proposed **balancing plan** to the **industry body** for approval; or
 - (b) if the amendments materially impact on the contents of the plan, must produce a new draft balancing plan, provide it to the **industry body**, and consult on it again in accordance with rule 31.1 (however, in this circumstance, the minimum number of days for the making of submissions is 10 **business days**).
- 32.3** Rule 31.2 and 31.3 apply to the resubmitted **balancing plan**.

33. Publication of initial balancing plan

- 33.1** As soon as practicable after the **industry body** has approved a **balancing plan** under rule 32, the **industry body** must –
- 33.1.1** notify the transmission system owners that the plan has been approved; and
 - 33.1.2** publish the approved **balancing plan** on its website; and
 - 33.1.3** publish, both in the Gazette and on the **industry body's** website, a statement specifying—
 - (a) that it has approved a **balancing plan**; and
 - (b) the go-live date on which, in accordance with rule 2, rules 6 to 11 and Part 2 come into force.
- 33.2** No later than 5 **business days** after the **industry body** publishes a statement under rule 33.1, the **transmission system owners** must **publish** the **balancing plan** on all relevant **information exchanges**.

Amendment to balancing plan

34. Process for amendment to approved balancing plan

- 34.1 A **balancing plan** that has been approved by the **industry body** may be amended at any time in accordance with the procedure in this rule.
- 34.2 An amendment to the **balancing plan** may be proposed by –
- 34.2.1 all **transmission system owners** together; or
 - 34.2.2 the **industry body**.
- 34.3 The **transmission system owners** may submit a proposed amendment directly to the **industry body** without complying with rule 35 if the proposed amendment–
- 34.3.1 is minor and technical; or
 - 34.3.2 in the **transmission system owners** view, needs to be made urgently.
- 34.4 A proposed amendment submitted under rule 34.3 must be accompanied by an explanation as to –
- 34.4.1 the reasons for the proposed amendment; and
 - 34.4.2 the reasons why the proposed amendment is considered to fit within the scope of rule 34.3.
- 34.5 The **industry body** must approve an amendment under rule 36 if the **industry body** agrees that the amendment fits within the scope of rule 34.3 and complies with rule 30.
- 34.6 If an amendment is proposed by the **industry body**, the **industry body** must submit the proposed amendment to the **transmission system owners**, together with an explanation for the proposed amendment.
- 34.7 One or more **transmission system owners** or other **users** may request the **industry body** to propose an amendment under this rule, and for that purpose may submit a suggested amendment to the **industry body**, who may, in its discretion decide whether or not to take up the suggested amendment.

35. Consultation on proposed amendments to balancing plan

- 35.1 This rule applies if the **transmission system owners**–

- 35.1.1 receive a proposed amendment to the **balancing plan** from the **industry body**; or
 - 35.1.2 wish to propose an amendment that does not fall within rule 34.3 (including one which was proposed to the **industry body** under that rule, but which the **industry body** has advised the **transmission system owners** it does not agree falls within the scope of that rule); or
 - 35.1.3 have proposed an amendment under rule 34.3.2, whether or not it has been approved by the **industry body**.
- 35.2 If this rule applies, the **transmission system owners** must-
- 35.2.1 consult on the proposed amendment (or approved urgent amendment) to the **balancing plan** with persons that the **transmission system owners** consider are representative of the interests of persons likely to be substantially affected by the proposed amendment; and
 - 35.2.2 give persons consulted with under rule 35.2.1 at least 20 **business days** to make submissions to the **transmission system owners** on the proposed amendment; and
 - 35.2.3 provide copies of the submissions to the **industry body** as soon as practicable after those submissions have been received; and
 - 35.2.4 consider the submissions made and, –
 - (a) if the **transmission system owners** wish (in conjunction with the **industry body** if it is the proposer), may make any minor amendments to the proposed amendment that the **transmission system owners** consider necessary; and
 - (b) submit the proposed amendment to the **industry body** for approval; or
 - (c) if the **transmission system owners** wish to make any material amendments to the proposed amendment, must propose a new amendment and follow the procedure in this rule again (however, in this circumstance, the minimum number of days for the making of submissions is 10 **business days**).
- 35.3 If the **transmission system owners** propose an amendment to the **balancing plan**, they must provide it to the **industry body** together with an explanation for the proposed amendment.
- 35.4 The **industry body** must **publish** each proposed amendment to the **balancing plan**, together with the explanation by the proposer.

36. Approval of amendment to balancing plan

- 36.1** If the **industry body** receives a proposed amendment under rule 34.3 or 35.2.4, the **industry body** must approve (or, in the circumstances in rule 38, confirm) the amendment if it is satisfied that it meets the requirements of these rules.
- 36.2** If the **industry body** declines to approve the proposed amendment to the **balancing plan** –
- 36.2.1** it must give reasons; and
- 36.2.2** may propose amendment to the **balancing plan** amendment; and
- 36.2.3** the **transmission system owners** must consider the reasons and any proposed amendment, and may amend the proposed amendment to the **balancing plan** and –
- (a) if the amendment does not materially impact on the contents of the **balancing plan** amendment, may resubmit the proposed **balancing plan** amendment for approval; or
- (b) if the amendments materially impact on the contents of the **balancing plan** amendment, must produce a new **balancing plan** amendment, and consult on it again in accordance with rule 35.2.

37. Publication of amended balancing plan

- 37.1** The **industry body** must as soon as practicable after approving an amendment to the **balancing plan** –
- 37.1.1** notify the **transmission system owners** that the amendment has been approved; and
- 37.1.2** **publish** the amended **balancing plan** on its website.
- 37.2** The **transmission system owners** must immediately upon receipt of notification under rule 37.1, **publish** the amended plan on all relevant **information exchanges**.
- 37.3** An amendment to the **balancing plan**, that is approved by the **industry body**–
- 37.3.1** on a date that is before the 25th of a month, comes into force on the 1st day of the month following the month in which the amended plan is **published** in accordance with rule 37.1.2; or
- 37.3.2** on a date that is the 25th, or after the 25th, of a month, comes into force on the 1st day of the 2nd month after the month in which the amended plan is **published** in accordance with rule 37.1.2.

37.4 Despite rule 37.3 an urgent amendment to the **balancing plan** comes into force on the date it is notified to the **transmission system owners** under 37.1.

38. Expiry of urgent amendments

38.1 An amendment to the **balancing plan** submitted under rule 34.3.2 (which relates to urgent amendments) expires after 60 **business days**, unless by that date, -

38.1.1 the amendment has been consulted upon by the **transmission system owners** under rule 35; and

38.1.2 confirmed by the **industry body** under rule 36.1.

38.2 If an urgent amendment expires, the **balancing agent** must –

38.2.1 notify the **transmission system owners** that the amendment has expired; and

38.2.2 **publish** the **balancing plan** as it was before the urgent amendment on its website.

Subpart 2

Appointment of balancing agent by industry body

39. Application of this Part

39.1 This subpart applies if –

39.1.1 the **transmission system owners** have failed to submit a proposed final **balancing plan** to the **industry body** under rule 31.3.1 within 60 **business days** of the **commencement date** and in the **industry body's** opinion the process in rules 28 to 33 -

(a) is at a deadlock; or

(b) is unlikely to be completed in a timely manner; or

39.1.2 there is no **balancing agent** appointed by the **transmission system owners** carrying out the functions in Part 2 following the **go-live date**; or

39.1.3 the **industry body** is satisfied that the **balancing agent** appointed by the **transmission system owners** under subpart 1 is failing to carry out its functions in accordance with these rules.

39.2 To avoid doubt, no person is required to comply with this subpart unless it applies.

40. Industry body's duties if subpart applies

40.1 If this subpart applies, the **industry body** must –

40.1.1 give the **transmission system owners** written notice that, subject to any submissions it may receive under rule 40.1.2 from a date specified in the notice it will –

- (a) appoint a **balancing agent** in accordance with rule 42; and
- (b) set and approve a **balancing plan** under rule 45; and

40.1.2 give the **transmission system owners** 15 **business days** to make submissions to the **industry body** in response to the notice; and

40.1.3 if not satisfied after receiving any submissions from the **transmission system owners** that by the date specified in the notice given under rule 40.1.1 there will be a **balancing agent** appointed by the **transmission system owners** in place who is carrying out functions in accordance with these rules – .

- (a) prepare and approve a **balancing plan** under rule 45; and
- (b) appoint a **balancing agent** in accordance with rule 42 to carry out the functions in Part 2 from the date the **balancing plan** comes into force under rule 46 or 47; and

40.2 The date specified in the notice under rule 40.1.1 must not be earlier than 30 **business days** from the date of the notice.

41. Consequences of appointment of balancing agent and setting of balancing plan by industry body

41.1 If the **industry body** appoints a **balancing agent** under rule 42, and publishes a **balancing plan** under rule 46 or 47 then, from the date the **balancing plan** comes into force –

41.1.1 the **transmission system owners** are not required to comply with rule 28; and

41.1.2 the appointment of any **balancing agent** by the **transmission system owners** is revoked; and

41.1.3 any **balancing plan** approved by the **industry body** under subpart 1 ceases to apply.

41.2 A **balancing agent** whose appointment is revoked under rule 41.1.2 must –

41.2.1 cooperate with the **balancing agent** appointed by the **industry body**; and

- 41.2.2 provide copies of all records kept under rule 24 to the **balancing agent** appointed by the **industry body**; and
 - 41.2.3 provide copies of all other relevant documents held by the agent that relate the **balancing agent's** functions to the **balancing agent** appointed by the **industry body**.
- 41.3 The **industry body** must pay the former **balancing agent** reasonable costs associated with the transfer of the **balancing agent** function.

Appointment of balancing agent

42. Appointment of balancing agent by industry body

- 42.1 If this subpart applies, the **industry body** may by agreement with any person appoint that person to act as the **balancing agent** under these rules.
- 42.2 In determining whether to appoint a person under rule 42.1, the **industry body** must have regard to –
 - 42.2.1 the person's capacity to carry out the functions of a **balancing agent** under these rules; and
 - 42.2.2 any other matter that in the **industry body's** opinion is relevant to the appointment.
- 42.3 To avoid doubt if a **balancing agent** is appointed by the **industry body** at a time when a **balancing agent** appointed by the **transmission system owners** is carrying out functions under these rules, the **balancing agent** appointed by the **industry body** is not required to carry out functions under Part 2 until the date the other **balancing agent's** appointment is revoked under rule 41.1.2.

43. Terms of appointment of balancing agent by industry body

- 43.1 The **industry body** and the person proposed to be appointed as the **balancing agent** under rule 42 must –
 - 43.1.1 agree the terms and conditions of the **balancing agent's** appointment under rule 42; and
 - 43.1.2 record those terms and conditions in a **balancing agent** service provider agreement.
- 43.2 The terms and conditions of the **balancing agent** service provider agreement–

43.2.1 may not be inconsistent with the obligations of the **balancing agent** under these rules; and

43.2.2 may provide for—

- (a) reasonable remuneration to be paid to the **balancing agent** by the **industry body**; and
- (b) the **industry body** to indemnify the **balancing agent** for any costs incurred by the **balancing agent** that are unable to be recovered from –
 - (i) **users** under rule 6.2.2(a); or
 - (ii) contracting parties in relation to the purchase and sale of **balancing gas**; and
- (c) the profits and loss on trading of gas under rule 23 to be passed on to or indemnified by the **industry body**; and
- (d) any other terms and conditions not inconsistent with these rules.

43.3 The **industry body** may at any time terminate, or change the appointment of, or reappoint, any person as the **balancing agent**, subject to the terms of the **balancing agent** service provider agreement.

44. Publication of balancing agent service provider agreement

44.1 The **industry body** must **publish** –

44.1.1 any **balancing agent** service provider agreement entered into by the **industry body**; and

44.1.2 any amendment to any **balancing agent** service provider agreement.

Balancing plan

45. Balancing plan

45.1 If this subpart applies, the **industry body** must –

45.1.1 prepare and **publish** a draft balancing plan that complies with rule 30; and

45.1.2 consult on the draft balancing plan with the **transmission system owners** and other persons that the **industry body** considers are representative of the interests of persons likely to be substantially affected by the proposed balancing plan; and

45.1.3 give persons consulted with under rule 45.1.2 at least 20 **business days** to make submissions to the **industry body** on the draft balancing plan; and

45.1.4 consider the submissions made and make any amendments to the draft balancing plan that the **industry body** considers necessary.

45.2 After following the procedure in rule 45.1, the **industry body** may set and approve the final **balancing plan**.

45.3 Despite anything in these rules, if a draft balancing plan has been consulted upon by the **transmission system owners** under rule 31, but the **transmission system owners** are unable to agree on the final **balancing plan** to be submitted to the **industry body**, or the **industry body** considers that further consultation is unnecessary, the **industry body** may set and approve a **balancing plan** under rule 45.2 without following the procedure in rules 45.1.2 to 45.1.4.

46. Publication of initial balancing plan

46.1 This rule applies if the **balancing plan** approved by the **industry body** under rule 45 is the first **balancing plan** approved by the **industry body** under these rules.

46.2 If this rule applies, as soon as practicable after the **industry body** has approved the **balancing plan**, it must –

46.2.1 **publish**, in the Gazette and on the **industry body's** website, a statement specifying—

(a) that it has approved a **balancing plan**; and

(b) the **go-live date** on which, in accordance with rule 2, rules 6 to 11 and Part 2 come into force; and

46.2.2 **publish** the approved **balancing plan** on its website.

46.3 No later than 5 **business days** after the **industry body publishes** a statement under rule 46.2, the **transmission system owners** must **publish** the **balancing plan** on all relevant **information exchanges**.

47. Publication of approved balancing plan

47.1 If rule 46 does not apply, -

47.1.1 the **industry body** must **publish** the plan approved under rule 45 as soon as practicable on its website; and

47.1.2 the **transmission system owners** must within 5 **business days** of approval of the **balancing plan** under rule 45 **publish** the **balancing plan** on all relevant **information exchanges**; and

47.1.3 the **balancing plan** approved under rule 45 comes into force, if the plan is **published** under rule 47.1.1 -

- (a) on a date that is before the 25th of a month, on the 1st day of the month following the month in which the plan is **published**; or
- (b) on a date that is the 25th, or after the 25th, of a month, on the 1st day of the 2nd month after the month in which the plan is **published**.

48. Amendments to balancing plan

48.1 The **industry body** may approve amendments to a **balancing plan** approved under rule 45 or 46.

48.2 However, unless the proposed amendment is minor and technical or in the **industry body's** view needs to be made urgently, the **industry body** must follow the procedure in rule 45 before approving the amendment (and in such case rule 45 applies with any necessary modifications as if the proposed amendment to the **balancing plan** were a draft balancing plan).

48.3 The **industry body** may follow the procedure in rule 45 in relation to an urgent amendment but, to avoid doubt, the amendment does not automatically expire.

48.4 One or more **transmission system owners** or other **users** may suggest amendments to the **balancing plan** to the **industry body**, and the **industry body** may, in its discretion decide whether or not to take up the suggested amendment.

48.5 If the **industry body** approves an amendment to a **balancing plan** approved under rule 45 or 46, -

48.5.1 the **industry body** must notify the **transmission system owners** of the amendment as soon as practicable and **publish** the amended **balancing plan** on its website; and

48.5.2 the **transmission system owners** must within 5 **business days** of approval of the amendment **publish** the amended **balancing plan** on all relevant **information exchanges**; and

48.5.3 the amendment to the **balancing plan** comes into force, if the amended **balancing plan** is **published** under rule 48.5.1 -

- (a) on a date that is before the 25th of a month, on the 1st day of the month following the month in which the plan is **published**; or

- (b) on a date that is the 25th, or after the 25th, of a month, on the 1st day of the 2nd month after the month in which the plan is **published**.

48.6 Despite rule 48.5, an urgent amendment to the **balancing plan** comes into force on the date it is notified to the **transmission system owners** under rule 48.1.

Subpart 3 **Funding**

49. Development fee

49.1 The development fee is a fee to meet the balancing regime development costs.

49.2 The balancing regime development costs are—

49.2.1 if subpart 1 applies, -

- (a) the costs of the **industry body** associated with reviewing and approving a **balancing plan** under subpart 1; and
- (b) the costs of the **industry body** in connection with the development and establishment of the **balancing** arrangements under subpart 1; and

49.2.2 if subpart 2 applies-

- (a) the costs of the **industry body** associated with the appointment of the **balancing agent**; and
- (b) the costs (if any) payable by the **industry body** to the **balancing agent** before the **go-live date** in respect of the development and establishment of any **balancing** arrangements required under these rules; and
- (c) the costs of the **industry body** in connection with the development and consultation on the **balancing plan** under subpart 2.

49.3 A person who is a **transmission system owner** at the –

49.3.1 commencement date, is liable to pay the development fee referred to in rule 49.2.1; and.

49.3.2 the date a **balancing plan** approved under subpart 2 comes into force is liable to pay the development fee referred to in 49.2.2.

49.4 To avoid doubt, -

- 49.4.1 the **balancing** regime development costs do not include costs incurred before the **commencement date**; and
- 49.4.2 if a development fee is payable in relation to the costs in rules 49.2.1 and 49.2.2, the same costs may not be included in both fees;
- 49.4.3 a **transmission system owner** may be liable to pay a development fee under both rules 49.3.1 and 49.3.2.

50. How and when balancing regime development fee must be paid

- 50.1 A development fee is payable to the **industry body**.
- 50.2 Every person to whom –
 - 50.2.1 rule 49.3.1 applies must supply to the **industry body** a return as at a date that is as soon as practicable after the **commencement date** and no later than 38 days after the **commencement date**; and
 - 50.2.2 rule 49.3.2 applies must supply to the **industry body** a return as at a date that is as soon as practicable after the date a **balancing plan** published under rule 46 or 47 comes into force and no later than 38 days after that date

(in each case “the deadline for supplying returns”)

- 50.3 A return under rule 50.2 must state—
 - 50.3.1 the total number of gigajoules of gas that were injected or received into any part of the **transmission system** owned by the **transmission system owner** that did not come from another part of the **transmission system**, during the 12 months prior to the month in which the deadline for supplying returns occurred; and
 - 50.3.2 the total number of gigajoules of gas that were taken out of any part of the **transmission system** owned by the **transmission system owner**, other than into another part of the **transmission system**, during the 12 months prior to the month in which the deadline for supplying returns occurred.
- 50.4 As soon as practicable after the deadline for supplying returns, the **industry body** must determine and **publish** a breakdown of the estimated **balancing** regime development costs.
- 50.5 As soon as practicable after the deadline for supplying returns, the **industry body** must invoice every person to whom the relevant paragraph of rule 49.3 applies for that person's share of the estimated **balancing** regime development costs calculated in accordance with the following formula:

$$S = A \times B/C$$

where—

- A is the estimated **balancing** regime development costs
- B is the sum of –
- (a) the total quantity of gas injected or received into the person's part of the **transmission system** that did not come from another part of the **transmission system** during the 12 month period covered by the return; and
 - (b) the total quantity of gas taken out of the person's part of the **transmission system**, other than into another part of the **transmission system**, during the 12 month period covered by the return; and
- C is the sum of –
- (a) the total quantity of gas injected or received into all persons' parts of the **transmission system** that did not come from another part of the **transmission system** during the 12 month period covered by the return; and
 - (b) the total quantity of gas taken out of all persons' parts of the **transmission system**, other than into another part of the **transmission system**, during the 12 month period covered by the return; and
- S is the amount that must be invoiced to the **transmission system owner**

50.6 As soon as practicable after each of the following dates, the **industry body** must determine and **publish** the actual **balancing** regime development costs—

50.6.1 the **go-live date**; and

50.6.2 if subpart 2 applies and the **balancing plan** approved under rule 45 is not the first **balancing plan** approved by the **industry body**, the date the **balancing plan** comes into force under rule 47.

50.7 No less than 10 **business days** after publication of the actual **balancing** regime development costs, the **industry body** must invoice or issue a credit note to every person to whom rule 49.3.1, or if relevant 49.3.2 applies with the difference between—

50.7.1 that person's share of the actual **balancing** regime development costs calculated in accordance with the formula in rule 50.5, with the necessary modifications; and

50.7.2 the amount of the estimated **balancing** regime development costs invoiced to that person.

51. Ongoing fees

51.1 The ongoing fees are monthly fees to meet the ongoing **balancing agent** costs.

51.2 The ongoing **balancing agent** costs are—

51.2.1 in respect of any period in which a **balancing agent** appointed by the **transmission system owners** is carrying out the functions in Part 2 -

- (a) the costs of the **industry body** associated with **balancing agent** management and its obligations under these rules, including in relation to any **balancing plan** amendments, during that year; and
- (b) the costs payable to any auditor appointed by the **industry body** under rule 55; and

51.2.2 in respect of any period in which a **balancing agent** appointed by the **industry body** is carrying out the functions in Part 2 -

- (a) the costs payable by the **industry body** to the **balancing agent** in respect of that year; and
- (b) the costs payable to any auditor appointed by the **industry body** under rule 55; and
- (c) the costs of the **industry body** associated with **balancing agent** management and its obligations under these rules, including in relation to any **balancing plan** amendments, during that year.

51.3 Each person who is a **transmission system owner** in a month is liable to pay ongoing fees for that month in accordance with these rules.

51.4 In this rule and rules 52 and 53, year means the financial year of the **industry body** unless the context otherwise requires.

52. How and when estimated ongoing fees payable

52.1 The estimated ongoing fees are payable to the **industry body**.

52.2 Rule 52.3 applies to each month after (and including the month of) the **go-live date**.

52.3 Every person to whom rule 51.3 applies must supply to the **industry body** a return no later than the tenth day of each month, unless otherwise agreed by the **industry body**.

52.4 The return must state—

52.4.1 the total number of gigajoules of gas that were injected or received into any part of the **transmission system** owned by the **transmission system owner**, other than from another part of the **transmission system**, during the previous month; and

52.4.2 the total number of gigajoules of gas that were taken out of any part of the **transmission system** owned by the **transmission system owner**, other than into another part of the **transmission system**, during the previous month.

52.5 As soon as practicable after the **go-live date**, the **industry body** must determine and **publish** a breakdown of the estimated **balancing** regime ongoing costs for the first year or part year of operation of the **balancing plan**.

52.6 As soon as practicable after the publication of those estimated balancing regime ongoing costs, the **industry body** must notify every person to whom rule 51.3 applies of the estimated **balancing** regime ongoing costs, and that ongoing fees will be payable by that person in that year or part year in accordance with the following formula:

$$S = A \times B/C$$

where—

A is the **balancing** regime ongoing costs estimated in accordance with rule 52.5 and divided by the number of months in the applicable year or part year

B is the sum of –

(a) the total quantity of gas injected or received into the person's part of the **transmission system**, other than from another part of the **transmission system** during the month before the month in which the relevant invoice is issued under rule 52.7; and

(b) the quantity of gas taken out of the person's part of the **transmission system**, other than into another part of the **transmission system** during the month before the month in which the relevant invoice is issued under rule 52.7; and

C is the sum of –

(a) the total quantity of gas injected or received into all persons' parts of the **transmission system** that did not come from another part of the **transmission system** during the month before the month in which the relevant invoice is issued under rule 52.8; and

(b) the total quantity of gas taken out of all persons' parts of the **transmission system**, other than into another part of the **transmission system**, during the month before the month in which the relevant invoice is issued under rule 52.8; and

S is the amount that must be invoiced to the **transmission system owner** for the month

52.7 For each year following the first year or part year of operation, the **industry body** must—

52.7.1 estimate and **publish** on its Internet site, at least 2 months before the beginning of the year, a breakdown of the estimated **balancing** regime ongoing costs for that year; and

52.7.2 as soon as practicable after publication of those estimated **balancing** regime ongoing costs, notify every person to whom rule 51.3 applies of the estimated **balancing** regime ongoing costs, and that ongoing fees will be payable by that person in that year calculated in accordance with the formula in rule 52.6.

52.8 On the first **business day** of each month following the notification in rule 52.5, the **industry body** or the **balancing agent** must invoice every person to whom rule 51.3 applies for that person's share of the estimated **balancing** regime ongoing costs payable during that month, calculated in accordance with the formula in rule 52.6.

52.9 If during a year a **balancing agent** appointed by the **transmission system owners** under rule 28.1.3 ceases to carry out functions under this **Act** and a **balancing agent** appointed by the **industry body** commences to carry out functions, the **industry body** must, in respect of the remainder of the year—

52.9.1 estimate and **publish** on its Internet site, as soon as practicable, a breakdown of the estimated **balancing** regime ongoing costs for the remainder of the year; and

52.9.2 as soon as practicable after publication of those estimated balancing regime ongoing costs, notify every person to whom rule 51(3) applies of the estimated balancing regime ongoing costs, and that ongoing fees will be payable by that person in that year calculated in accordance with the formula in rule 52.5.

53. How and when actual ongoing fees payable

53.1 The actual ongoing fees are payable to the **industry body**.

53.2 As soon as practicable after the end of each year of operation, the **industry body** must determine and **publish** on its Internet site, and on the **balancing agent** Internet site, a breakdown of the actual **balancing** regime ongoing costs for that year.

53.3 No less than 10 **business days** after publication of those actual **balancing** regime ongoing costs, the **industry body** must invoice, or issue a credit note, to each person to whom rule 51.3 applies for the difference between—

53.3.1 that person's share of the actual **balancing** regime ongoing costs calculated in accordance with the formula in rule 51.6, with the necessary modifications; and

53.3.2 the amount of the estimated **balancing** regime ongoing costs invoiced to that person in respect of the year.

54. General provisions regarding fees

54.1 The due date for the payment of any invoice or refund of any credit under this subpart is—

54.1.1 the 20th day of the month in which the invoice or credit note was received; or

54.1.2 if the day referred to in rule 54.1.1 is not a **business day**, the following **business day**.

54.2 The fees payable under rules 49 to 53 are exclusive of any goods and services tax payable under the Goods and Services Tax Act 1985, and goods and service tax on those fees (if any) will be added to the invoices or credit notes issued under rules 49 to 53.

54.3 The **industry body** must ensure that all information and returns that are supplied under rules 49 to 53 are used only for the purposes of collecting the development fee or fees and ongoing fees.

Part 4

Miscellaneous

Audit of Balancing Agent's Performance

55. Industry body to commission performance audits

55.1 The **industry body** may, from time to time, arrange performance audits of the **balancing agent**.

55.2 The purpose of a performance audit is to assess—

55.2.1 the performance of the **balancing agent** in terms of compliance with these rules; and

55.2.2 the systems and processes of the **balancing agent** that have been put in place to enable compliance with these rules.

55.3 The **industry body** must appoint as auditor a person who –

55.3.1 is independent to and not in a position of conflict of interest with the **balancing agent** or a **transmission system owner**; and

55.3.2 is not an officer or employee of the **industry body**.

55.4 In conducting an audit under this rule, the auditor must not consider any action, circumstance, event, or inaction that occurred 30 months or more before the date the audit was requested by the **industry body**.

56. Provision of information to auditor

56.1 In conducting an audit under rule 55, the auditor may:

56.1.1 request any information from the **balancing agent**, the **industry body** and any **transmission system owner**; and

56.1.2 request to examine any processes, systems and data of the **balancing agent**, provided such processes, systems and data are directly relevant to the performance of the **balancing agent** in terms of compliance with these rules.

56.2 Any request under rule 56.1 must be reasonable and strictly for the purposes of the audit.

56.3 The **balancing agent**, the **industry body** and every **transmission system owner** must comply with a request under 56.1 but nothing in this rule limits any claim for legal professional privilege.

56.4 In providing information to the auditor, a **transmission system owner** or the **balancing agent** may indicate to the auditor where such information is considered to be confidential.

57. Auditor to prepare draft audit report

57.1 The auditor must prepare, in writing, a draft audit report on the conclusions reached and recommendations formulated as a result of conducting an audit under rule 55.

57.2 Subject to rule 59, the auditor must give a copy of the draft audit report to -

57.2.1 the **balancing agent**; and

57.2.2 any **transmission system owner** whom the auditor considers has an interest in the report; and

57.2.3 the **industry body**.

57.3 The persons referred to in rule 57.2, have 10 **business days** from the date the report is received to provide the auditor with comments on the report.

58. Auditor to prepare final audit report

58.1 Before the auditor prepares a final audit report on the conclusions reached and recommendations formulated as a result of conducting an audit under rule 55, the auditor must take into account any comments received on the draft audit report.

58.2 The final audit report must be in writing and, if so requested by the **balancing agent**, must include as an appendix any comments from the **balancing agent** on the draft audit report.

58.3 The auditor must give a copy of the final audit report to –

58.3.1 the **balancing agent**; and

58.3.2 any **transmission system** owner who the auditor considers has a material interest in the report; and

58.3.3 the **industry body**.

58.4 Subject to rule 60, once the auditor has given a final audit report under this rule, the report may not be altered in any way.

59. Confidential information in audit reports

59.1 In providing a draft audit report or final audit report, the auditor must provide a complete version to the **industry body**.

59.2 However, at the discretion of the auditor, the versions of the draft audit report and the final audit report provided to any other person or published under these rules may exclude any confidential information obtained in the conduct of the audit.

60. Publication of final audit reports

60.1 The **industry body** must **publish** all final audit reports.

60.2 However the **industry body** must not **publish** a version of the final audit report that contains confidential information obtained in the conduct of the audit.

61. Use of final audit reports

61.1 To avoid doubt, a final audit report may be used –

61.1.1 for the purposes of the Gas Governance (Compliance) Regulations 2008;

61.1.2 for the purposes of considering any amendments to these rules;

61.1.3 by the **industry body** -

- (a) for the purpose of reviewing the performance of the **balancing agent** under these rules, or under the **balancing agent** service provider agreement;
- (b) for the purpose of reviewing the performance of an auditor; and
- (c) for any other purposes that it considers necessary.

Notices

62. Giving of ordinary notices

62.1 If these rules require any notice to be given, the notice must be in writing and be—

62.1.1 delivered by hand to the nominated office of the addressee; or

62.1.2 sent by post to the nominated postal address of the addressee; or

62.1.3 sent by fax to the nominated fax number of the addressee; or

62.1.4 sent by electronic transmission or any other similar method of electronic communication to the appropriate nominated electronic address of the addressee.

62.2 Despite rule 62.1, it is sufficient notice for the purposes of these rules if notice to **users** of the **balancing agent's** allocation of **balancing gas** and **cost** is notified via an **information exchange** accessible to the **user**.

62.3 This rule does not apply to the giving of urgent notices, but does apply to the confirmation of urgent notices under rule 64.

63. When ordinary notices taken to be given

63.1 In the absence of proof to the contrary, notices are taken to be given,—

63.1.1 in the case of notices delivered by hand to a person, when actually received at that person's address:

63.1.2 in the case of notices sent by post, at the time when the notice would in the ordinary course of post be delivered, and in proving the delivery, it is sufficient to prove that the notice was properly addressed and posted:

63.1.3 in the case of notices sent by fax, at the time indicated on a record of its successful transmission:

63.1.4 in the case of notices sent by electronic transmission or any other similar method of electronic communication, including via an **information exchange** —

(a) at the time the computer system used to transmit the notice has received an acknowledgment or receipt to the electronic address of the person transmitting the notice; or

(b) at the time the person who gave the notice proves the notice was transmitted by computer system to the electronic address provided by the addressee.

63.2 This rule does not apply to the giving of urgent notices, but does apply to the confirmation of urgent notices under rule 64.

64. Urgent notices

64.1 Despite rule 62 and 63, an urgent notice may be given orally where the person issuing a notice considers that the urgency of the situation means the notice should not be given in writing.

64.2 If an urgent notice is given orally under rule 64.1 the person who gave that notice must, as soon as practicable, confirm that urgent notice in writing in accordance with rules 62 and 63.

Miscellaneous

65. Safety override

65.1 No person is required to comply with a provision of these rules to the extent that compliance would unreasonably endanger the life or safety of that person or any other person.

66. Relationship with transmission system codes

66.1 Every **transmission system code** must be read subject to these rules.

66.2 If both a **transmission system code** and these rules impose an obligation or liability in respect of the same matter, the obligation or liability under these rules prevails to the extent that the obligation or liability in the code is inconsistent with these rules.

67. Relationship with Gas Governance (Critical Contingency Management) Regulations 2008

67.1 If the **balancing agent** receives notice under regulation 51 of the Gas Governance (Critical Contingency Management) Regulations 2008 that a critical contingency has been declared -

67.1.1 the **balancing agent** must cease to carry out its functions under these rules until a notice is received under regulation 62 of those regulations to advise that that the critical contingency has been terminated; and

67.1.2 to the extent that there is any inconsistency between the Gas Governance (Critical Contingency Management) Regulations 2008 and these rules in respect of the actions to be taken during a critical contingency, the Gas Governance (Critical Contingency Management) Regulations 2008 prevail.

SCHEDULE

Requirements for Balancing plan

A **Balancing agent.**

Details about the person who has been appointed as the **balancing agent** under rule 28 or 42, including the name and contact details of the **balancing agent**.

B Management of **linepack**

Details of the boundaries of each part of the **transmission system** that is to constitute a separate **balancing zone** which -

- a. must be set to ensure all parts of the **transmission system** are within a **balancing zone**; and
- b. to avoid doubt, may define the entire **transmission system** as a single **balancing zone**.

The following information in relation to each **balancing zone**:

- a. whether the **balancing zone** will be **directly managed** or **indirectly managed** by the **balancing agent**:
- b. the upper and lower threshold for the taking of **balancing** action by the **balancing agent**, which –
 - (i) must be set to give the maximum practicable flexibility for managing **linepack** without unreasonably interfering with the transmission of gas; and
 - (ii) may be different for different periods of the day, week or year; and
 - (iii) may be defined by reference to a formula with measurable variables; and
- c. the target **linepack**, which must be the midpoint between the upper and lower thresholds referred to in paragraph b:

- d. if the **balancing zone** is to be **indirectly managed**, the process by which the **balancing zone** will be managed (for example, by pressure regulator feed from a zone that is **directly managed**), including any rights to compressor operation
- e. any points for measuring pressure that are reasonably necessary for the purposes of the **balancing agent** carrying out its functions.

The processes for each of the following:

- a. notification by a **transmission system** owner to the **balancing agent** in the event of any curtailment by the **transmission system owner** in its parts of the **transmission system**:
- b. coordination by the **balancing agent** with a **transmission system owner** if a safety issue arises:
- c. notification of any maintenance activities that may impact upon **linepack**:
- d. coordination of the operation of compressors.

C Provision of information

The procedures for the giving of the information in rules 7 and 9 to the **balancing agent** by **users** and **transmission system owners**

D **Balancing gas**

Details relating to the procurement of **balancing gas** including the following

- a. reasonable technical requirements for the provision of **balancing gas**:
- b. the times and decision process for **balancing actions**:
- c. price thresholds for procuring **balancing gas**, which must be a dollar per gigajoule amount set –
 - (i) in the case of purchase of **balancing gas**, at a level which is a pre-estimate of the critical contingency price that would be applied after a critical contingency under the Gas Governance (Critical Contingency) Regulations 2008, and
 - (ii) in the case of sale, at a level which is a pre-estimate that is representative of the marginal cost of non-production of gas to

producers of gas (and which, to avoid doubt, may be a negative number).

E Allocation model:

An allocation model for the allocation of **balancing gas** and associated cost that has the following features:–

- (a) **balancing gas is allocated–**
 - (i) to the **users** who have an **imbalance** at the time the **balancing agent** commits to a **balancing action**; and
 - (ii) in the proportions that the **user's imbalance** contributed to the need to take the **balancing action**:

- (b) if a **balancing action** is made necessary in a **balancing zone (balancing zone A)** due in part or in whole to an **imbalance** in another **balancing zone (balancing zone B)** allocates–
 - (i) the relevant proportion of **balancing gas** and cost to the **users** in **balancing zone B** who contributed to the **imbalance** in **balancing zone A**; and
 - (ii) within **balancing zone B**, **allocates** the **balancing gas** sold or purchased and associated costs of that gas
 - (A) to the **users** who have an **imbalance** at the time the **balancing agent** commits to a **balancing action**; and
 - (B) in the proportions that the **user's imbalance** contributed to the need to take the **balancing action**:
 - (C) all **balancing gas** purchased or sold as part of the **balancing action** is **allocated** to a **user**.

Appendix C Consequential amendments to other regulations

Gas Governance (Critical Contingency Management) Regulations 2008

- Regulation 51 is amended by inserting the following paragraph after paragraph (e):

‘(ea) the balancing agent appointed under the Gas Governance (Balancing) Rules 2009; and’

- Regulation 62 is amended by inserting the following paragraph after paragraph (e):

‘(ea) the balancing agent appointed under the Gas Governance (Balancing) Rules 2009; and’

Gas Governance (Compliance) Regulations 2008

- Regulation 3 is amended by inserting new subclause: ‘(e) Gas Governance (Balancing) Rules 2009’

- Regulation 4 is amended by inserting in the correct alphabetical order:

‘balancing agent means the service provider appointed by transmission system owners or the industry body under rule 28(1)(c) or 42 of the Gas Governance (Balancing) Rules 2009’

- Regulation 4 is amended by inserting in paragraph (b) of the definition of ‘participant’ –

‘(iv) a user and the balancing agent; or ’

- Regulation 11(1) is amended by omitting ‘or the allocation agent or the critical contingency operator’ and ‘or allocation agent or the critical contingency operator’, and in both places substituting ‘, allocation agent, critical contingency operator, or balancing agent’.

- Regulation 11(3) is amended by omitting ‘or allocation agent or critical contingency operator’, and substituting ‘, allocation agent, critical contingency operator, or balancing agent’.

- Regulation 11(4) is amended by adding after ‘Gas (Downstream Reconciliation) Rules 2008,’ the words ‘regulation 55 of the Gas Governance (Balancing) Rules 2009,’

- Regulation 14(1)(c) is amended by omitting 'or the allocation agent or the critical contingency operator', and substituting ', allocation agent, critical contingency operator, or balancing agent'.
- A new regulation is inserted after regulation 58A providing a cap on liability for the balancing agent:

'58B Liability of balancing agent

The balancing agent is liable for any breach that it commits of Part 2 of the Gas Governance (Balancing) Rules 2009.

The balancing agent is not liable under these regulations for a sum in excess of –

\$50,000 in respect of any one event or series of closely related events arising from the same cause or circumstance; or

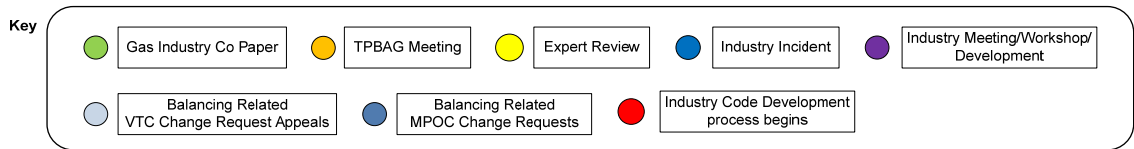
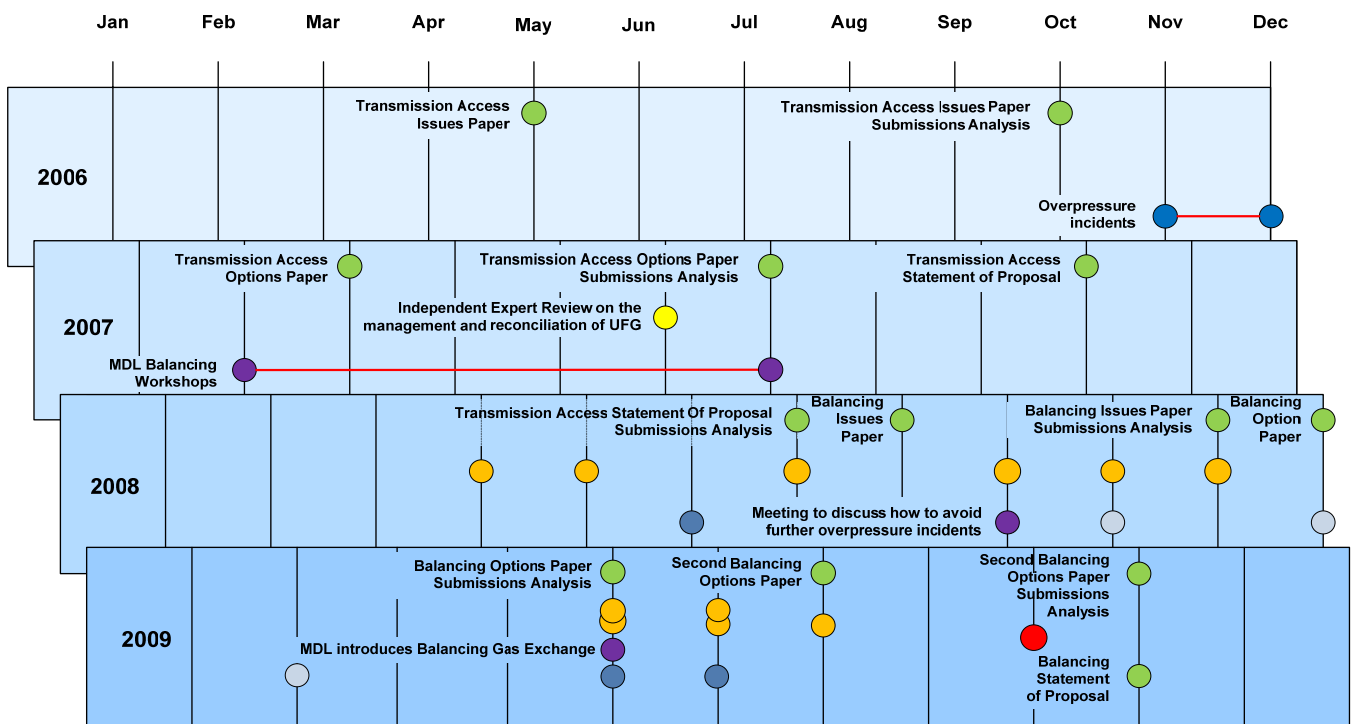
\$250,000 in respect of all events occurring in any financial year.'

Appendix D Background to balancing review

Introduction

This paper is a timeline of previous work on transmission pipeline balancing and market developments that have occurred since this work began in 2006. It has been included as background for readers who are new to the topic of balancing, or those who wish to refresh their memory. It provides a context for how the options presented in this paper have been developed.

Figure 7: Timeline of previous work on transmission pipeline balancing



Transmission Access work stream period

March 2006: Transmission Access review begins

In 2006, Gas Industry Co began a review to determine whether access arrangements on gas transmission pipelines met the objectives of the Gas Act and GPS. The review commenced in March with a series of stakeholder interviews. At that time, although open access had been offered on Vector's pipelines for over 10 years, the Maui pipeline only became open access from 1 October 2005. The two access regimes had significant design and operational differences and many concerns were raised by pipeline owners and pipeline users, both about the individual regimes and the interface between them.

June 2006: Transmission Access Issues Paper

In June 2006, Gas Industry Co released the Transmission Access Issues Paper. Although it considered all aspects of access, the main concerns raised by the paper in connection to balancing were as follows.

- The operational complexity and cost of balancing arrangements. Specific issues included:
 - The division of the New Zealand pipeline system into four main balancing pools (one for MDL and three for Vector Transmission). The paper questioned whether this complexity was necessary—most pipeline users considered that the combined pipeline system could be balanced as a single system, as it had been in the past.
 - Multiple balancing pools were considered to possibly prevent a pipeline operator from calling on balancing gas in 'merit order', that is the cheapest source first.
- The administrative complexity of allocating balancing gas costs between multiple balancing pools.
- Cost allocation arrangements influencing operator behaviour.
- The setting of tolerances, which was complex and contentious.
- The lack of information for Shippers to gauge or manage their likely imbalance position and balancing charges.

- Possible conflicts of interest, which might influence a pipeline operator's decisions. The paper suggested this risk could be reduced by developing clear and transparent operating procedures and guidelines that aimed to minimise overall balancing costs.
- The ability of legacy Shippers to retrospectively adjust nominations negated many of the incentives and mechanisms built into balancing arrangements.

The Transmission Access Issues Paper concluded that balancing arrangements were complex and unfair, and potentially inefficient. These concerns arose mainly because of the different balancing arrangements on the Maui and Vector pipelines. The paper suggested a simpler regime could involve a single balancing pool and a single operator. Gas Industry Co urged pipeline owners to develop balancing procedures and protocols and to assist in educating Shippers on the new arrangements. It proposed that balancing should be reviewed again in a year's time, when industry had gained more experience of the new arrangements.

Transmission Access Issues Paper- Analysis of Submissions

Gas Industry Co invited submissions on the Transmission Access Issues Paper and released a Transmission Access Issues Paper Analysis of Submissions in October 2006. Submitters generally agreed that the system should be operated as a single unit, but believed that the balancing pools accurately allocated cost. On other matters there was a diversity of views. The paper considered that this was because '...balancing arrangements are complex and nobody has really got to the bottom of exactly how they will operate'.

Gas Industry Co considered that the balancing arrangements were still not well tested, and that it was too early to consider fundamental changes. Instead, the focus should be on making the existing arrangements more transparent. To assist, Gas Industry Co established a 'balancing forum' at which pipeline operators explained to Shippers and other interested parties how balancing arrangements operate.

Gas Industry Co also recommended that pipeline operators continue to develop and refine their balancing procedures and protocols, and report on those developments at the balancing forum.

November and December 2006: Over-pressure incidents

Significance of over-pressure issues

During the last few months of 2006, the Maui pipeline experienced repeated over-pressure incidents. The Target Taranaki Pressure of 48 bar was exceeded on four occasions, despite active intervention by the MDL Commercial Operator.

These incidences were symptomatic of a failure of the commercial balancing arrangements. This failure put producers who did not have compressors capable of injecting gas into the pipeline at much above 48 bar at risk of being prevented from flowing scheduled quantities of gas.

Response

The MDL Commercial Operator's initial response to the over-pressure incidents was to issue Operational Flow Orders (OFOs) to the Welded Points it believed to be causing the problem. This approach was challenged by users who considered OFOs to be unnecessary and doubted the Commercial Operator was acting as a 'reasonable and prudent operator'. Of particular concern to some users was the material adverse commercial consequences of obeying the orders. In practice, the OFOs were not obeyed, and the Commercial Operator sought an alternative approach to dealing with the issue.

For subsequent over-pressure incidents, the Commercial Operator reduced Scheduled Quantities at some Receipt Points. This 'shotgun' approach proved more effective than targeting specific Receipt Points, but it had the potential to injure innocent parties. In particular, some Shippers were forced into mismatch positions and cashed out—that is, they were sold mismatch gas from the pipeline. While the Commercial Operator's approach was effective in reducing pressure in the pipeline, the means of doing so further undermined confidence in the balancing arrangements.

Outcome

To identify the causes of the 2006 pipeline over-pressure incidents, MDL launched a series of industry workshops. The aim was to consider various aspects of pipeline operation that may have contributed to the over-pressure incidents. In a letter to the MDL Commercial Operator in February 2007, Gas Industry Co set out its views on MDL's process for resolving the over-pressure situation. Gas Industry Co supported the workshops, and suspended some aspects of its own Transmission Access Review process (the balancing and legacy forums) to avoid duplicating effort. Gas Industry Co accepted an invitation to attend the MDL workshops as an observer. Separate workshops focused on each aspect of balancing. These are described below.

February to July 2007: MDL balancing workshops

Unaccounted for gas (UFG)

One MDL workshop considered UFG. It was not able to arrive at any consensus over the possible influence of accumulated UFG on the over-pressure situation, or on the appropriate future treatment of UFG. At the final UFG Workshop on 30 April 2007, participants concluded that it was impossible to reconcile the diverse views on how UFG should be treated.

In the absence of an industry consensus, Gas Industry Co commissioned an independent expert to review the treatment of UFG on both the Maui and Vector transmission pipelines and to make recommendations where appropriate. The report, UFG Management and Reconciliation—An Independent Expert Report, was issued in June 2007.³³

Daily allocation

Another workshop considered the influence of daily allocation. Some parties believed that balancing difficulties arose in part because reliable data on the quantities of gas sold, purchased, and transported were not available until the month-end reconciliation was complete. The Daily Allocation workshop considered the feasibility of reconciling all gas quantities on the day following gas flow, to a standard that would not require revision. It was concluded that there was a trade-off between how soon reconciled quantities could be made available and the reliability of those quantities. Also, if daily allocation were possible, it would involve new processes and systems requiring several years to develop. This proposal was therefore unlikely to improve balancing arrangements in the short-term.

Although no further work was done on daily allocation at the time, Gas Industry Co has recently resumed work on assessing whether allocating gas flows on the day following gas flow ['D+1 allocation'] is justified.

Legacy arrangements

Another workshop considered legacy arrangements which preserved the rights of parties to the original Maui Gas Contracts. These parties—Vector, Contact Energy and Methanex—had exclusive use of the Maui pipeline prior to open access, and the MPOC granted them special rights to preserve their commercial positions. These rights essentially allowed the parties to flow as much legacy gas as they needed on the day, rather than having to forecast their requirements in advance and then paying penalties (in the form of balancing charges) for any forecasting errors. The Legacy workshop sought a means of preserving these rights while at the same time preventing them from frustrating the balancing mechanisms. Several suggestions were considered, but no solution was found.

Balancing

The last workshop of this series was simply called the 'Balancing workshop'. It considered a wide range of technical and commercial aspects of balancing. While it provided a more comprehensive understanding of the trade-offs faced by pipeline operators, no simple solutions emerged. The main issues considered were:

- the need for a diverse range of balancing sources;

³³ This report is available on Gas Industry Co's website.

- the development of a market-based system to reduce balancing costs;
- the need to reduce dependency on balancing gas;
- the development of fair 'causer pays' cost-allocation mechanism; and
- physical aspects/limitations of the pipeline.

One general conclusion was that it would make sense (from physical and commercial perspectives) if the Vector and MDL pipelines were balanced as a single entity by a single Balancing Agent.

Results of the workshop process

The MDL workshop process disseminated a wide range of information related to pipeline balancing, and increased the general level of understanding among Shippers and pipeline operators. However, the process failed to identify clearly the causes of the over-pressure incidents, or reach consensus on how the various influencing factors should be dealt with.

The MDL Commercial Operator undertook to hold open meetings to update the industry on any pipeline initiatives being undertaken by either the MDL Commercial Operator or System Operator. Improvements have been slow to emerge, but balancing instructions from MDL to its Commercial Operator have continued to evolve; and the MDL Commercial Operator has continued to improve its balancing gas procurement arrangements.

March 2007: Transmission Access Options Paper

In parallel with the MDL workshops, Gas Industry Co continued its work on the wider aspects of transmission access. In March 2007, it issued the Transmission Access Options Paper, which evaluated four access framework options to resolve the problems identified in the Transmission Access Issues Paper. The options were:

- Minimal Change—making the minimal amount of change to current arrangements;
- Industry Club—establishing a strengthened and mandatory New Zealand Pipeline Access Code with industry club constitutional arrangements (of the kind which were originally envisaged when the code was written, but never effected);
- Light Regulation—converting a strengthened New Zealand Pipeline Access Code into mandatory rules; and

- Heavy Regulation—converting a strengthened New Zealand Pipeline Access Code, and the Maui Pipeline Operating Code and Vector Transmission Code into mandatory rules.

Light Regulation emerged as the preferred option, with the mix of characteristics judged best able to provide access rights to new entrants, manage the multilateral terms of access, and address conflicts of interest.

Transmission Access Options Paper-Analysis of Submissions

On analysis of submissions on the Transmission Access Options Paper Gas Industry Co did not change its view that the Light Regulation approach was the preferred option. However, submitters made some suggestions that Gas Industry Co incorporated in the next phase of development. Gas Industry Co also undertook to prepare a more detailed description of the Light Regulation option.

June 2007: Independent Expert Report on the management and reconciliation of UFG

As noted above, MDL's workshop on UFG failed to reach a consensus on how to progress this issue. Gas Industry Co commissioned an independent expert's report on the matter to help resolve the issue.

The report examined the calculation and cost allocation of UFG on the Maui and Vector pipelines and recommended how UFG should be dealt with.

The report's conclusions included the following.

- Any UFG not offset by balancing gas bought or sold by the pipeline operator is manifest in equal and opposite imbalances in linepack, mismatch or operational imbalance or a combination of these.
- Aggregate UFG over the period beginning with MDL open access (1st October 2005) to the end of May 2007 was approximately -1.25PJ. Only a small amount of this UFG was sold by the MDL Commercial Operator. Most of the remainder manifested as a large negative operational imbalance at Oaonui. The imbalance was a result of the MDL Commercial Operator issuing balancing put requests to the Oaonui Welded Party to manage linepack.
- It was understood that most of the UFG accruing on Vector Transmission pipelines was bought or sold through competitive tenders. So there was only a small amount of outstanding UFG on Vector pipelines. Therefore, the problem of reconciling outstanding UFG was confined to the MDL pipeline.

- Historical accumulated UFG should be resolved (the paper proposed several ways of doing so). UFG accruing after this date should be managed according to a preferred future UFG solution (again, the paper proposed several alternatives).

Gas Industry Co expected that MDL would consider these findings and develop an appropriate policy to deal with UFG. Although this did not happen at the time, Gas Industry Co understands that MDL is currently working on such a policy.

October 2007: Vector Transmission Code introduced

During 2007, Vector developed a Vector Transmission Code (VTC). The VTC contained Vector's multilateral Shipper arrangements and progressively displaced the existing Shipper contracts. The VTC came into effect on 11 October 2007. The code contained a detailed mechanism for allocating balancing cost to shippers, the Balancing and Peaking Pool (BPP).

October 2007: Transmission Access Statement of Proposal

The other major event in October 2007 was the release of the Transmission Access Statement of Proposal detailed the Light Regulation option. It described it as a system containing:

- regulations on transmission access specifying overarching requirements;
- transmission system codes specifying standard terms (the detailed multilateral access arrangements);
and
- negotiated arrangements agreed between a TSO and a Shipper or interconnected party specifying variations to the standard terms.

The paper included draft Transmission Access Regulations, which defined three 'standard services': transport, interconnection, and balancing. In relation to balancing the main requirements were:

- the TSO must offer a balancing service (an agreement to deliver or receive any imbalances between nominated and actual gas amounts);
- balancing services may be offered either to Shippers or to Welded Parties;
- at inter-pipeline points, imbalances must be attributed to the TSO;
- the TSO must specify in its code how imbalances may be aggregated between users or across welded points before balancing charges are levied;

- the TSO is responsible for any imbalances arising from own-use gas, unaccounted for gas or at inter-pipeline points;
- the TSO must account for these imbalances as though it were paying for them on standard terms;
- the TSO must endeavour to minimise the costs of balancing associated with the purchases of balancing gas and balancing services;
- the TSO must procure balancing gas in an open and transparent way; and
- the TSO must provide information to users on their imbalances and balancing charges

The draft regulations also contained a common governance framework. The framework aimed to ensure that TSOs and transmission system users complied with the arrangements; and that disputes could be resolved in a timely and efficient manner. Ring-fencing provisions were also included to ensure that TSOs offered standard services on reasonable terms and conditions to all users, irrespective of their affiliation.

Transmission Access Framework Statement of Proposal-Analysis of Submissions

Gas Industry Co issued a Transmission Access Framework Statement of Proposal Analysis of Submissions in July 2008. In responding to the Statement of Proposal, some submitters suggested that the draft Gas Transmission Access Regulations may have gone beyond the regulation-making power in the Gas Act to 'prescribe reasonable terms and conditions of access'.

On review, Gas Industry Co accepted that there was an unacceptable level of risk in pursuing the framework approach that the draft regulation proposed. Gas Industry Co continued to believe there was merit in the framework approach and has recommended to the Minister that the Gas Act be changed to achieve that outcome. However, in the short-term, Gas Industry Co decided to separate the framework approach into individual work streams, including balancing. This recognised the widespread industry view that, while a contracts based solution to balancing problems was possible, it was also important to develop a regulatory back stop.

Pipeline balancing work stream period

April 2008: Transmission Pipeline Balancing Research Paper

As its first piece of work under the balancing work stream, Gas Industry Co issued the Transmission Pipeline Balancing Research Paper in April 2008. This paper gathered information relevant to pipeline

balancing as a resource for the industry to use in further consideration of the issues, and taking action to resolve them. The intention was not to identify all the problems with balancing arrangements. Rather it sought to present information about the balancing regime as a basis for further discussion. Gas Industry Co wished to engage with the industry to further improve balancing arrangements.

The paper noted balancing arrangements had changed little since the MDL over-pressure forums. It suggested the lack of progress may have resulted from the ongoing influence of the legacy Maui gas contract. However, other matters had also remained unresolved.

The paper examined the suitability of New Zealand's pipeline balancing arrangements by measuring them against the guidelines for best practice in Europe designed by the European Regulators Group for Electricity and Gas (ERGEG).³⁴ The paper concluded that some of the design of the balancing arrangements were flawed, and that the two balancing regimes (on the Maui and Vector systems) were not working well together. Among other matters, concerns raised were about:

- the apparent inability of TSOs to resolve issues that had been identified;
- weak incentives on the TSOs to use the most efficient balancing arrangements;
- lack of transparency on balancing transactions;
- individual TSOs balancing actions being sub-optimal from a total system perspective; and
- socialisation of balancing costs (ie sharing the costs among users rather than targeting it to causers).

These issues were subsequently debated in an advisory group and reflected in an issues paper, as discussed below.

April 2008: Gas Industry Co establishes an advisory group

As an aide to developing effective policy, in April 2008 Gas Industry Co established the Transmission Pipeline Balancing Advisory Group (TPBAG), comprising industry experts able to advise it on the technical and commercial aspects of transmission pipeline balancing.

August 2008: Balancing Issues Paper

In August 2008, Gas Industry Co released the Balancing Issues Paper. The paper acknowledged that the industry had made some progress on balancing issues:

³⁴ See 'Guidelines of Good Practice for Gas Balancing (GGPGB) E06-GFG-17-04', ERGEG, 6 December 2006.

- MDL had introduced new balancing gas procurement arrangements and issued a new balancing instruction to its operator;
- there was the prospect of a settlement to a long-running dispute between MDL and Vector over imbalance quantities;
- retrospective re-nominations of legacy Maui gas were no longer made; and
- an MPOC change request was being considered which would remove the legacy provisions.

The Issues Paper:

- discussed linepack management including balancing tools and responsibilities;
- considered potential market failures and the case for regulatory intervention;
- described balancing arrangements in New Zealand and compared these with balancing principles developed in Europe by ERGEG;
- analysed the issues that are currently preventing effective balancing; and
- grouped and discussed design options in moving toward improved balancing arrangements.

Gas Industry Co remained concerned that core elements of the balancing regime were flawed. These concerns were described as follows. (A full discussion on each can be found in the Balancing Issues Paper.)

- Poor governance: existing balancing provisions are unclear or hard to enforce and it is hard to gain agreement on changes needed.
- The role of the Balancing Agent is unclear.
- Poor information on balancing status: users—especially mass market retailers—have poor information on current imbalances.
- Multi-day balancing and pricing period: whilst nominally one day, the balancing period historically extends over several days, because of ILON provisions and pricing lags.

- Poor transparency: it is unclear to users how balancing costs are incurred and how prices are set.
- Poor allocation of positive imbalance costs: charges to users for positive imbalances are much less than the costs that these imbalances create.
- Competing Balancing Agents: there is potential for the two Balancing Agents to be in conflict and add to balancing costs and complexity.
- High transaction costs: the complexity of balancing arrangements may give rise to unnecessarily high transaction costs.
- Inappropriate tolerances: tolerances may be too high in aggregate (compared with linepack limits) and not allocated to those who value them most.

The paper concluded that the new balancing arrangements introduced to the Maui and Vector pipelines on the commencement of the Maui pipeline open access regime on 1 October 2005 had not been operating as intended. Although some potentially improvements were anticipated, particularly the removal of the legacy provisions, Gas Industry Co remained concerned that core elements of the balancing regime were flawed, and would not provide efficient pipeline balancing.

Transmission Pipeline Balancing Issues paper-Analysis of Submission

In November 2008, Gas Industry Co issued an Analysis of Submissions on the Transmission Pipeline Balancing Issues Paper. Nine submissions were received.

Submissions reflected a general level of agreement that the issues identified in the Issues Paper accurately reflected current balancing arrangements. However, submitters felt that before further work was done, the issues needed to be clearly defined and priorities set.

Gas Industry Co's recommendation to adopt the ERGEG principles as a set of guidelines for progressing balancing options had only partial support. Gas Industry Co clarified that its intention was not for a literal adaptation of the ERGEG principles to the New Zealand gas market, but for them to act merely as a guide. The paper further clarified that options for balancing arrangements will be measured against the Gas Act and GPS while having regard for EGREG principles.

A broad range of comments were received on the possible design elements required to create a balancing solution. The majority of submitters recognised the likely efficiencies of creating a single balancing function. However, several submissions noted the importance of keeping the actual

balancing function contestable as well as being aware of the potential concentration of market power the could occur under a single Balancing Agent.

Both incremental and single (fundamental redesign) approaches were proposed as options to reach the desired outcome. Vector's submission proposed a single fundamental redesign and included an overview of how such a regime would operate. Vector felt a single overhaul solution would be the most cost effective way to achieve a satisfactory result, because incremental changes can lead to inconsistent outcomes. However, MDL felt that the 'balancing problems currently being experienced could not be solved using a "single big bang" approach' and that an incremental approach would be necessary. Gas Industry Co responded that both options needed refining before their costs and benefits could be assessed and before they could be considered 'reasonably practicable'.

The Analysis of Submissions concluded by outlining the next steps Gas Industry Co would pursue under the balancing work stream. Gas Industry Co stated it would continue to work alongside the TPBAG to further explore design elements and regime options, the outcome of which would be presented in an Options Paper.

September 2008: Forum to discuss further over-pressure incidents

Over-pressure incidents occurred on the Maui and Vector pipelines during a three to four week period in the summer of 2006/2007 and, to a lesser extent, 2007/2008. In September 2008, Gas Industry Co convened an industry forum to discuss how to prevent a similar situation occurring in the summer of 2008/09. However, there were reasons to expect the situation would not be repeated:

- the MPOC Change Request removing legacy gas provisions would allow MDL to issue one day ILONs;
- revised contracts for balancing gas would allow MDL to sell put gas to parties to clear the excess linepack; and
- possibly increased demand at Methanex (in the event no problems were experienced).

December 2008: Removal of legacy provisions from the MPOC

On 20 June 2008, Gas Industry Co received an MPOC change request from MDL. The change request proposed deleting the parts of the MPOC relating to Maui legacy gas.

Not all submissions supported the removal of the legacy provisions. Mighty River Power believed a means of managing Shippers' Mismatch risks should be in place before the provisions were removed. Vector did not support the change request until it had settled its dispute with MDL over the issue and cash-out of ILONs at Vector Welded Points. Nova Gas thought the change request failed to explain

how pipeline balancing would occur without the legacy provisions (in a supplementary submission, Nova Gas proposed further changes to MPOC, which it considered would provide the basis for more robust balancing arrangements).

Following consultation Gas Industry Co issued a final recommendation in October 2008 supporting the removal of the legacy provisions. MDL removed the legacy provisions from the MPOC in December 2008.

December 2008: Transmission Balancing Options Paper

The Options Paper:

- defined the problems associated with gas balancing and explained why Gas Industry Co proposes intervening;
- set out the key principles for balancing arrangements;
- detailed changes to the arrangements that Gas Industry Co regards as necessary and relatively non-contentious regardless of what other design elements are chosen in the preferred solution;
- described the core design features common to all practicable solutions;
- assessed the core design features;
- described the design features of Gas Industry Co's proposal that require further investigation;
- made a preliminary assessment of the design features that require further investigation; and
- outlined Gas Industry Co's proposal for improving gas balancing arrangements and the further work required to refine the proposal.
- set out Gas Industry Co's preferred solution comprised a package of elements including:
 - MPOC changes;
 - an independent expert review of MPOC tolerances;
 - analysis of daily allocation options to lessen the risks for mass market retailers;

- analysis of options for extended nominations; and
- a recommendation to the Minister of Energy that regulations be introduced to appoint an independent Balancing Agent.

Transmission Pipeline Balancing Options Paper- Analysis of Submissions

Gas Industry Co released an Analysis of Submissions on the Transmission Pipeline Balancing Options Paper in May 2009. The submissions indicated widespread support for a single balancing regime; however, they all raised concerns about the cost of achieving this by creating an independent Balancing Agent contracted to Gas Industry Co. Many submitters also believed that more work was needed to define the Balancing Agent function, and the degree of 'independence' that was required (some felt that existing ring-fencing arrangements are sufficient). Also, MDL considered that a pipeline owner's 'sovereignty' over its own business should not be infringed without compelling reasons.

Several submissions noted the improvements in balancing behaviour which occurred as a result of the removal of the legacy provisions from the MPOC (on 12 December 2008). Also, it was suggested that subsequent changes to MDL's balancing procurement arrangements may resolve some of the concerns raised in the Options Paper.

One submission raised concerns about the operation of the Balancing and Peaking Pool (the VTC mechanism for allocating imbalance costs). It suggested that regulation may be required to remedy the situation. This issue was also raised in various ways by other submitters. For example, Vector noted that if it withdrew from its interconnection agreement with MDL a new mechanism for recovering imbalance charges would need to be developed.

The Options Paper suggested ways of allocating daily balance positions at mass market delivery points (that is, locations where distribution networks interconnect with the transmission pipelines). The preferred option was the use of an algorithm based on historic month-end allocations. Most submitters agreed, but considered that deliveries to large end users would have to be deducted from the delivery point quantities before allocation takes place. Making these deductions would increase the complexity and cost of this option substantially, and might make it unviable.

Vector was the only submitter who considered that a '...fundamental and comprehensive redesign of the regime, implemented through regulations, is the only way to achieve an effective solution to pipeline balancing'. It suggested that its own proposal had not been adequately analysed by Gas Industry Co.

Other submitters preferred an incremental approach, but had differing views on how much needed to be changed.

Several submitters raised security of supply as an issue. MDL also cautioned against the view that pipeline balancing can be separated from the other tasks governing physical security of the pipeline.

Genesis advocated daily cash-out of excess operation imbalance, a position also favoured by MDL. Other submitters considered that cash-outs should only occur when balancing actions are taken.

Gas Industry Co acknowledged that some progress towards resolving balancing issues had been achieved, but that it had to ensure that such improvements, even if they are working to everyone's satisfaction, were efficient and durable.

July 2009: Industry consultation and development of the Second Balancing Options Paper

Possible termination of Vector-MDL interconnection agreement

Disputes relating to the allocation of balancing gas costs have arisen between Vector and its Shippers, and Vector and MDL, over the recovery of balancing costs. Vector has not paid balancing costs claimed by MDL because Vector has not recovered those costs from its Shippers. Vector considers the root cause of these disputes to be the chronic failure of the wider balancing arrangements. This has resulted in Vector '... assessing its withdrawal from the OBA'³⁵

The OBA (Operational Balancing Agreement) is the MPOC arrangement that makes Vector responsible for imbalance at points where the Vector pipeline interconnects with the Maui pipeline. Vector then recovers costs associated with such imbalances from Vector Shippers, who are primarily responsible for the quantities of gas flowing at those points.

Section 22.9 of the MPOC would permit Vector (as a 'Welded Party') to terminate its Interconnection Agreement with MDL on 90 days' notice. If Vector did terminate, Vector and MDL would need to agree alternative arrangements for interconnection. Such a change would require consequential changes to the Vector Transmission Code and any related gas trading arrangements. This would be costly and disruptive to commercial arrangements in the industry. It would also bring pressure on Gas Industry Co to impose a solution.

In March 2009, Gas Industry Co wrote to Vector and MDL setting out its concerns about this situation and asking for a meeting to explore how the situation could be managed. Several meetings were held to discuss how the issue related to the wider balancing solution.

³⁵ p11 of Vector's submission on the Options Paper.

Resumption of Transmission Pipeline Balancing Advisory Group meetings

Following the meetings with Vector and MDL discussed above, Gas Industry Co held several meetings with the TPBAG, to update the group on Gas Industry Co's policy development work and get further input.

Gas Industry Co advised the TPBAG that consideration of the submissions on the December 2008 Options Paper had not radically changed its vision of how balancing arrangements need to change. But submissions had influenced its opinion on how the changes should be progressed.

Gas Industry Co noted the widespread support for a single unified balancing arrangement applicable to both transmission systems, and to all system users. In Gas Industry Co's view, the features of this regime should be:

- obligations on users to maintain balanced positions;
- tolerances which in aggregate are less than the inherent inter-day balancing linepack flexibility;
- balancing costs allocated to causers;
- balancing gas procured efficiently;
- users having options to manage risk;
- transparency of balancing gas costs and quantities;
- conflicts of interest addressed;
- over-pressure compensation introduced (and low pressure tidied up in light of critical contingency regulations);
- common treatment of balancing disputes;
- clear responsibilities and governance; and
- balancing regulations, if necessary to address such matters as information inadequacies, continuity and availability of service, common good allocation, unequal bargaining power, rationalisation and co-ordination.

July 2009: Transmission Pipelines Balancing Second Options Paper

In light of submission received on the Options Paper and events that occurred since its publication, Gas Industry Co identified that there was a need to develop a further set of options. In July 2009, Gas Industry Co released the Transmission Balancing Second Options Paper. The paper presented four reasonably practicable options which Gas Industry Co believed to be appropriate considerations to improve the balancing market.

In accordance with section 43N(1)(a) of the Gas Act, Gas Industry Co must identify all reasonably practicable options for achieving the objective of the regulation. In the Second Options Paper, the following options were presented:

- Contracts based option;
- Prescriptive regulation option A;
- Prescriptive regulation option B; and
- Participative regulation option.

Transmission Pipeline Balancing Second Options Paper- Analysis of Submissions

The Second Options Paper contained a series of questions, to which interested parties were asked to respond. Ten submissions on the Second Options Paper were received. These submissions were analysed in Gas Industry Co's Transmission Pipeline Balancing Second Options Paper- Analysis of Submissions of September 2009 (Analysis of Submissions).

Submissions relayed a divided view of how participants believed Gas Industry Co should address balancing. Vector and MDL, in particular, are not aligned on the issue. Vector is of the view that regulations should be pursued whereas MDL advocates a contracts option with regulations being pursued in areas necessary (if any). MDL went further to outline a work programme it intends to complete in order to show Gas Industry Co how it could without regulations meet the intended outcomes and fulfil regulatory objectives. Many submitters supported this view that some form of a contracts based option was likely to result in the most effective arrangements for industry. Several notified Gas Industry Co that good industry progress was being made and that within several months' improvements would be seen.

The majority of submitters agreed that the participative regulation option was reasonably practicable, however, many felt that it should only be pursued only if some form of the contracts based option proved unsuccessful.

Many submitters expressed concern over the scope of balancing that had been identified by Gas Industry Co. In particular, submitters felt that the availability of user's information to effectively manage their positions should be addressed as well nomination arrangements.

In its response, Gas Industry Co acknowledged concerns regarding the proposed regulations as well as the work programme. In order to address the concerns raised, Gas Industry Co considered that a process should be facilitated in order to explore the possibility of the regulations being reduced to cover only those areas necessary. This led to the development of the industry code development (ICD) process.

September 2009: Industry Code Development Process

As noted above, Gas Industry Co determined that a process aimed at minimising the scope of the rules while targeting a more unified balancing regime should be pursued. The ICD process involves Gas Industry Co assisting with the facilitation of focussed industry meetings.

The outcomes of this process will be reported on in November 2009. The outcome of which may impact upon the recommendation to the Minister on balancing arrangements in December 2009. If the outcome will substantively impact upon Gas Industry Co's proposal, a further statement of proposal will be issued.

Glossary

balancing agent	The party with the responsibility for the 'residual balancing role'.
balancing gas	Gas added to or removed from the transmission pipelines by the Balancing Agent in order to manage linepack.
balancing market	The market created by the Balancing Agent when sourcing or disposing of balancing gas, whether a contracts market or a spot market. This may be different from other markets due to the timeframes for dispatching gas.
BPP	'Balancing and Peaking Pool'. A mechanism in the Vector transmission regime to ring fence and allocate balancing costs via a trust account.
cash-out	A forced trade with the Balancing Agent, used to correct part or all of a user's imbalance position.
CCMRs	Gas Governance (Critical Contingency Management) Regulations 2008.
critical contingency	A low pressure event that is sufficiently severe to invoke the CCMRs.
ERGEG	European Regulators Group for Electricity and Gas.
extended nominations proposal	A comprehensive solution to balancing problems proposal by Vector in its submission on the Issues Paper.
Gas Act	Gas Act 1992.
GPS	Government Policy Statement on Gas Governance issued under the Gas Act published 18 April 2008.
ICD	Industry Code Development.
ILON	Imbalance Limit Overrun Notice as defined and used in the MPOC.
industry body	The body appointed under section 43ZL of the Gas Act.

Incentives pool	A mechanism in the Maui transmission regime to ring fence and allocate damage costs via a trust account.
imbalance	In this report the term imbalance refers to the difference between receipts and deliveries on the pipeline and can be Operational Imbalance of the Maui pipeline or Mismatch on either the Maui pipeline or Vector pipelines.
Issues Paper	Transmission Pipeline Balancing Issues, August 2008, Gas Industry Co.
MDL	Maui Development Limited (an agent company for the Maui Joint Venture that owns the Maui transmission pipeline).
MDL Commercial Operator	'Maui Development Limited Commercial Operator'. An agent to manage the commercial arrangements of the Maui open access regime, including balancing services.
mismatch	The difference between a Shipper's receipts and deliveries which is a form of imbalance.
MPOC	Maui Pipeline Operating Code.
NZGE	New Zealand Gas Exchange, the day-ahead gas trading platform currently under development by Gas Industry Co.
OATIS	'Open Access Transmission Information System'. The information system and internet site used to manage the day to day operations of open access on the Maui and Vector pipelines
OFO	Operational Flow Order, an instruction to a user to curtail gas flow.
operating imbalance	The difference between scheduled quantities (gas entitlement) and actual flow at a welded point, which is a form of imbalance.
Options Paper	Transmission Pipeline Balancing Options, December 2008, Gas Industry Co.
residual balancing role	The role of managing linepack after the users have endeavoured to balance themselves, to ensure safe and reliable transmission services.
Second Options	Transmission Pipeline Balancing Second Options Paper, July 2009,

Paper	Gas Industry Co.
TOU	Time of use - generally used in reference to metering that records consumption on an hourly basis.
TPBAG	Transmission Pipeline Balancing Advisory Group.
transmission pipeline	High pressure pipelines used to transport natural gas which does not include distribution networks.
TSO	Transmission System Owner.
ICD	Industry code development, the industry process led by Gas Industry Co aimed at minimising the scope of the proposed balancing regulations.
UFG	Unaccounted for Gas, a change in linepack where the source is not identified largely due to metering or estimation errors.
User	The users of the transmission services—either a Shipper or Welded Party.
Vector	Vector Limited in its role as owner of the Vector transmission pipelines.
VTC	Vector Transmission Code.