



# Final Recommendation on 13 October 2011 MPOC Change Request

**Date issued: April 2012**







## **About Gas Industry Co.**

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

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

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

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

# Executive summary

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In February 2012, Gas Industry Co released a Draft Recommendation supporting an October 2011 Maui Pipeline Operating Code (MPOC) change request, proposed by Maui Development Limited (MDL), primarily aimed at improved targeting of balancing costs. Submissions on the Draft Recommendation confirm that most shippers and Vector oppose the proposed change. While there is broad agreement that the current arrangements are not optimal, those opposing the change generally consider the degree of cost mis-allocation from current arrangements is acceptable or that it is preferable to introduce other changes to allow parties to better manage their risks before implementing the proposal.

We acknowledge that, in the wider gas market context, better outcomes will be achieved if, alongside implementing the change request, changes can be made to other industry arrangements (for example by allocating delivery quantities among retailers on the day after gas flow, and allowing retailers to access the Balancing Gas market). However, our analysis of the change request, including consideration of all matters raised in submissions, concludes that it will better meet the objectives of the Gas Act and Government Policy Statement than current arrangements. In particular, it will improve and simplify the targeting of costs to causers by freeing the allocation of balancing costs from complex and inefficient distortions (the 'ILON' process, and claims against the Incentives Pool). Those improvements, together with the role and objectives defined for Gas Industry Co under the MPOC, mean that Gas Industry Co should support the change request.

MDL is also aware of the benefits of other changes and has agreed to delay implementing the MPOC change until 1 June 2013, allowing time for industry participants to negotiate and implement these other improvements. We hope that industry participants will approach the change as a catalyst for further improvements.

# Contents

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<b>1</b>	<b>Introduction</b>	<b>7</b>
1.1	Purpose	7
1.2	Gas Industry Co's role under the MPOC	7
1.3	Background	8
1.4	Matters addressed in this Final Recommendation	10
<hr/>		
<b>2</b>	<b>Submissions on Draft Recommendation</b>	<b>11</b>
<b>3</b>	<b>Alleged procedural breaches</b>	<b>13</b>
3.1	Alleged breach of cross-submission process	13
3.2	Alleged breach of cost-benefit analysis requirement	14
3.3	Alleged mis-timing of cost-benefit analysis	15
3.4	Alleged mis-assessment of 'status-quo'	15
3.5	Alleged disregard of customer preferences	16
<hr/>		
<b>4</b>	<b>Alleged Commerce Act breach</b>	<b>17</b>
<b>5</b>	<b>Claimed errors in analysis</b>	<b>18</b>
5.1	Graph on page 17 of Draft Recommendation	18
5.2	Application of Peaking Limits	20
5.3	Application of Peaking Charges	21
5.4	Productive Efficiency analysis	21
5.5	Allocative efficiency analysis	24
5.6	User risks	24
<hr/>		
<b>6</b>	<b>New matters raised</b>	<b>27</b>
6.1	Climate change and security of supply	27
<hr/>		
<b>7</b>	<b>Final recommendation</b>	<b>29</b>
	<b>Glossary</b>	<b>30</b>
	<b>Appendix A Summary of submissions on Draft Recommendation</b>	<b>33</b>



# 1

## Introduction

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### 1.1 Purpose

This paper presents a final recommendation in respect of the MPOC change request submitted by MDL on 13 October 2011 (the October 2011 change request).

Readers may wish to reference Gas Industry Co's website for full copies of all relevant documents, including:

- The October 2011 change request, with related submissions and cross submissions; and
- Gas Industry Co's Draft Recommendation, issued in February 2012, with related submissions.

Note that MDL's cross submission dated 31 January 2012, contains an MPOC version in which various drafting errors were corrected. We considered these in section 2.2 of the Draft Recommendation and concluded that these corrections did not materially affect the change request. This Final Recommendation evaluates the change request inclusive of those corrections.

### 1.2 Gas Industry Co's role under the MPOC

Section 29 of the MPOC assigns Gas Industry Co a role in respect of any proposed amendment to the MPOC (change request). Gas Industry Co's role is to consult on the change request with the gas industry and determine whether or not to support it. Gas Industry Co evaluates any proposed change having regard to the objectives of Section 43ZN of the Gas Act. A change request proceeds only where required by law or where Gas Industry Co makes a written recommendation to MDL supporting the change request. MDL has sole discretion to reject a recommendation if it considers the change would materially adversely affect its business, or would require MDL to incur a capital expenditure that may not be recoverable.

Gas Industry Co has agreed a Memorandum of Understanding (MoU) with MDL describing how its role in relation to change requests will be performed. The MoU sets out a process under which Gas Industry Co receives a change request; calls for submissions; issues a draft recommendation; considers further submissions; and makes a final recommendation to MDL. The MoU also provides that Gas Industry Co will have regard to the objectives specified in Section 43ZN of the Gas Act when performing its role, and prepare an analysis of the issues under consideration,

including an assessment of the costs and benefits. For further information (including a copy of the MoU) please refer to Gas Industry Co's website at [www.gasindustry.co.nz](http://www.gasindustry.co.nz).

Gas Industry Co's contractual role under the MPOC is different to Gas Industry Co's role under the Gas Act. Whereas our Gas Act role requires the consideration of all practicable options before making a recommendation to the Minister, the MPOC role is more constrained. Importantly, the MPOC role does not permit Gas Industry Co to reject a change request because it believes it is not ideal, or that there may be a better alternative, or that there are additional things that could be done to improve balancing arrangements. Our scope to recommend modifications to the change request is limited to minor and technical matters.

## 1.3 Background

### Context

Balancing arrangements have been under review since the inception of the Maui Pipeline Operating Code in 2005. Transmission Pipeline Balancing has been the subject of extensive industry discussion since then and some improved arrangements have been introduced, notably:

- In 2007, Vector introduced the Vector Transmission Code (VTC) containing balancing and peaking pool (BPP) arrangements designed to pass balancing costs through to Vector shippers;
- In 2009, MDL introduced a Balancing Gas Exchange (BGX) – an online platform to facilitate the trading of Balancing Gas on the Maui Pipeline (several BGX upgrades have occurred since then); and
- MDL has continued to evolve its Balancing Gas standard operating procedure, first made public in 2007.

However, although the shortcomings of the balancing arrangements have been thoroughly analysed and debated, and although there is broad consensus on what these shortcomings are and how they could be improved, the basic balancing arrangements have not changed. The most recent efforts to reform the arrangements were:

- In 2009, Gas Industry Co led a comprehensive and concentrated industry initiative known as the Industry Code Development (ICD) process, which ultimately failed to agree on how to reform the codes;
- Also in 2009, Gas Industry Co proposed to introduce regulations to achieve a unified balancing regime over both the Maui and Vector pipelines. That proposal is on hold. Gas Industry Co undertook to report to the Minister, in early 2012 on what improvements the industry has made to balancing arrangements<sup>1</sup>;

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<sup>1</sup> The Minister was advised (in a letter dated 2 March 2012, available on Gas Industry Co's website) that improvements were in train and that Gas Industry Co considered that it was appropriate to let them run their course.



- On 17 December 2009, MDL submitted an MPOC change request that proposed extensive revisions to the MPOC including balancing improvements (December 2009 change request). That change request was ultimately not supported by Gas Industry Co because *'while the assessment of the net benefit of the December 2009 change request is finely balanced, the overall conclusion is that the overall net benefit is not sufficiently certain for Gas Industry Co to support the December 2009 change request'*. We suggested that MDL repackage the change request so that proposed changes related to a single function, such as back-to-back (B2B) balancing.

MDL has now developed the October 2011 change request focused on the introduction of a B2B balancing arrangement to better target balancing costs to the pipeline users responsible for causing those costs.

### **Current change request**

The October 2011 change request proposes to implement a B2B balancing arrangement in the MPOC. This accords with Gas Industry Co's suggestion (from the Final Recommendation on the 17 December 2009 change request) that change requests should be narrowly focused. Most notable among the proposed amendments are:

- Introducing principles to make the role of the Balancing Agent transparent;
- Publishing new information on OATIS and the BGX including when the Balancing Agent enters into a balancing transaction, and real-time metering information at certain locations;
- Removing Transmission Pipeline Welded Parties' (TPWP)<sup>2</sup> ability to nominate Balancing Gas during the post-Intra-Day cycle;
- Replacing the current Imbalance Limit Over-run Notice (ILON) process with B2B balancing arrangements;
- Removing the Balancing Agent's ability to claim against the Incentives Pool (IP);
- Introducing a peaking charge that will be triggered whenever Balancing Gas has been called, or whenever Line Pack falls below a certain threshold; and
- Revised peaking limits and Running Operational Imbalance Limits (ROIL) to better allocate balancing costs to causers.

On 17 October 2011, Gas Industry Co notified industry participants of the change request and invited submissions. Eight submissions on the change request were received.

On 2 December 2011, Gas Industry Co notified industry participants that it had decided to invite cross-submissions. Five cross-submissions were received.

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<sup>2</sup> The only current TPWP is Vector.

## **Draft Recommendation**

On 22 February 2012, Gas Industry Co issued a Draft Recommendation on the October 2011 change request (Draft Recommendation). The Draft Recommendation included an analysis of the change request, and submissions and cross-submissions received. Gas Industry Co's Draft Recommendation supported the October 2011 change request. Six submissions were received on the Draft Recommendation. The submissions are summarised in Section of this Final Recommendation.

### **1.4 Matters addressed in this Final Recommendation**

Submissions received on the Draft Recommendation are summarised in section 2 and Appendix A.

Section 3 responds to some issues in relation to the process Gas Industry Co follows in making recommendations on MPOC changes.

Section 4 discusses a claim that certain proposed changes may breach the Commerce Act.

Section 5 discusses a number of areas where submitters consider the Draft Recommendation contained factual errors.

Section 6 addresses a new matter raised in a submission.

We do not repeat the analysis presented in the Draft Recommendation, but correct and supplement it where necessary.

Also, we have not addressed all matters raised in submissions. For example, some matters raised are expressions of preferred alternatives to the change request, rather than being directly relevant to the assessment of the change request. While we are keen to discuss these matters in other forums, our role in considering and making a recommendation to MDL on whether we support a change request is quite limited. We think it would be confusing, and redundant, if our analysis of the change request were to consider such matters.

Capitalised terms used in this recommendation have the same meaning given to those terms in the MPOC, unless stated otherwise. A Glossary of terms is provided at the end of this report.

# 2

## Submissions on Draft Recommendation

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Gas Industry Co received six submissions on the February 2012 Draft Recommendation. Submitters were:

- Contact Energy Limited (Contact)
- Genesis Energy Limited (Genesis Energy)
- Greymouth Gas New Zealand Limited (Greymouth)
- Maui Development Limited (MDL)
- Mighty River Power Limited (MRP)
- Vector Limited (Vector)

A summary of submissions is provided in Appendix A. Full submissions are available at the Gas Industry Co website. Broadly, submissions aligned with previous submissions and cross submissions on the change request:

- Contact continues to oppose the proposal, believing that it does not provide adequate confidence that it will result in sufficiently improved pipeline balancing.
- Genesis Energy supports the Draft Recommendation, considering that the change request will enable improvements in the status quo, and that delaying the implementation until 1 June 2013 should allow sufficient time to progress these improvements. Genesis Energy offers to assist with this work.
- Greymouth believes that no balancing issue currently exists, and no solution is necessary. It alleges a number of procedural breaches in Gas Industry Co's processing of the change request, raises Commerce Act concerns about the effect of the proposal, claims analysis shortcomings, and suggests adverse climate change outcomes.
- MDL, the proposer of the change request, re-affirms that it is a step towards international best practice, although it does not go as far as MDL would wish.
- MRP remains unconvinced that the proposal will bring a net benefit, and considers that B2B balancing will cause higher retail prices.

- Vector continues to oppose the proposal, and considers that a 'fundamental rethink' is required to address the issue. It particularly objects to the introduction of a peaking mechanism which, it believes will lead to higher costs that will not be directed to causers.

# 3

## Alleged procedural breaches

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Greymouth is concerned that a number of procedural breaches may have occurred in processing the change request. These are discussed below. We note that parties to the MPOC can propose changes to the change request process if they believe that procedural matters need to be clarified.

### **3.1 Alleged breach of cross-submission process**

In its 31 January 2012 cross-submission, MDL acknowledged several drafting errors in the MPOC version accompanying the October 2011 change request and proposed some corrections. Most of these errors had been identified in submissions on the change request. Gas Industry Co reviewed these proposed corrections and concluded that they did not materially affect the change request. The Draft Recommendation evaluated the change request inclusive of the corrections. While no submissions argue that the drafting corrections are material, Greymouth argues they were invalid for process reasons.

Greymouth notes that, in inviting cross-submissions, Gas Industry Co had made it clear that cross-submissions should only address points raised in original submissions, and that it would be unlikely to review any new material raised. Greymouth submits that it was therefore wrong for Gas Industry Co to consider the corrections MDL submitted in its cross-submission.

Gas Industry Co could have asked MDL to submit the drafting corrections under a separate letter, rather than in its cross-submission. However, we made it very clear in the Draft Recommendation that we were assessing the change request as corrected, and invited submissions on our assessment of the corrections. We think it is unlikely that having the changes submitted by MDL under a separate letter would have added any more clarity or changed the subsequent analysis in any way.

In any event, aside from Greymouth's procedural objection, no submissions challenged our assessment that the drafting corrections did not materially affect the change request. Accordingly, we do not think that the process adopted failed to provide submitters with appropriate opportunity to submit nor that there was any other material disadvantage to stakeholders or barrier to analysis of the proposal and submissions.

### 3.2 Alleged breach of cost-benefit analysis requirement

The Draft Recommendation contains a qualitative assessment of the costs and benefits of the proposal. Greymouth considers that a quantitative analysis is necessary because:

- it is reasonable to expect, given that balancing has been an issue for more than three years;
- the possible cost savings do not justify the additional costs;
- no alternative scoring or weighting of benefits is provided; and
- there are wider economic issues to consider, such as climate change.

Gas Industry Co has addressed this matter previously. In section 1.4 of the draft final recommendation on the 17 December 2009 MPOC change request we note that:

'... the evaluation method does not need to be quantitative. Rather it involves qualitative judgements by Gas Industry Co, having considered the information presented to it, assessed the merits of the various aspects of the change request, and exercised reasonable judgement.'

Our view that a numerical cost-benefit analysis is not always required is unchanged. However, we did consider whether there would be merit in developing a numerical cost-benefit analysis for the change request. We concluded that it was very unlikely that such analysis would be useful, or help industry participants assess the likely impact of the proposal. The reason is the wide uncertainty that would apply to the various factors in the analysis. For example:

- The benefit would be a function of:
  - the availability and elasticity of Balancing Gas, including an assessment of the supply functions of alternatives, such as storage and interruptibility;
  - the degree to which users trade Balancing Gas on the market or privately now, and in the future; and
  - the aggregate quantum of balancing required.
- Depending on where the boundary of the analysis was drawn, the benefit could also include efficiency gains in related markets such as:
  - the market for wholesale gas supply;
  - the market for storage gas supply; and
  - the market for retail gas supply.
- The costs could include:

- increased management of balance positions (although arguably these should already be inherent in the current obligation for each welded party to balance).

Aside from the large uncertainty around each of these factors, there would also be debate around:

- dynamic effects (dynamic efficiency benefits are often the greatest portion of total benefits but, by their long-term nature, are inherently more uncertain); and
- opportunity costs (Greymouth argues that gas will be flared. If this is so, an assessment of the opportunity cost of that gas would be needed.)

These considerations suggested to us that there was very little merit in pursuing a numerical cost benefit analysis.

### **3.3 Alleged mis-timing of cost-benefit analysis**

Greymouth considers that Gas Industry Co has conducted its (qualitative) assessment of costs and benefits at the same time as deciding to support the change request. Greymouth notes that the MoU provides for that assessment to be made before deciding whether or not to support a proposed change. By not doing so it believes Gas Industry Co cannot have fully considered submissions related to the assessment.

In response, we note that our preliminary decision to support the change request was the conclusion of our assessment of the costs and benefits, which weighed the various matters raised in submissions and cross-submissions on the proposal. The preliminary decision to support the proposal was therefore a product of, and came after, our assessment.

### **3.4 Alleged mis-assessment of 'status-quo'**

Greymouth considers that Gas Industry Co has not evaluated the proposal against the 'status-quo'. In particular, it believes that Gas Industry Co assumes that BGX2 will be successful, and that that success will lead to further improvements. Also, Greymouth finds Gas Industry Co's cover note to the Draft Recommendation to be an attempt to justify the change request in the context of a future-state envisaged by Gas Industry Co.

We sought to make plain in the Draft Recommendation that, while we had assessed the proposal against current arrangements, we did not consider it to be a complete solution to balancing issues. For example:

Gas Industry Co's assessment is that the proposal will better achieve Gas Act objectives than current arrangements and, in particular, is likely to enhance efficiency. Particular points are:

- The proposal would move balancing arrangements a step closer to 'causer pays' and to international practice (for example, as set out in the Framework Guideline for Gas Balancing in Transmission Systems developed by the European Regulators Group for Electricity and Gas).

- As reflected in submissions, the change would not provide a complete answer to balancing issues and will have flow-on effects, including to the Vector transmission system, which should be addressed. Accompanying this draft decision is an industry communication that discusses actions over the next 12 months aimed at further improving balancing arrangements.

[Draft Recommendation, Executive Summary]

The reason for providing a cover note was to distinguish our broader thinking on balancing improvements from the more limited analysis of the change request. We therefore do not accept Greymouth's submission on this point.

### **3.5 Alleged disregard of customer preferences**

The April 2008 Government Policy Statement on Gas Governance (GPS) states:

'12 It is the Government's intent that these other policy objectives should apply to all Gas Industry Co recommendations for rules, regulations or non-regulatory arrangements for all parts of the gas industry. In addition, the Government adds the following objectives:

...

4) The quality of gas services where those services include a trade-off between quality and price, as far as possible, reflect customers' preferences'

Greymouth believes that Gas Industry Co has a duty to consider the preferences of customers for MDL's balancing service, most of whom oppose the change request.

We believe the concept of a quality-price trade-off is that customers can choose a lower quality service for a cheaper price, or vice versa. For example, customers who do not require rapid delivery of goods should not be required to have those goods transported by air; a lower priced overland service could offer a quality-price trade off.

We do not think that any trade-off of this nature is involved in the change request under consideration. The quality of the residual balancing service is not at issue. It will continue to be provided to the same standard as before. The Balancing Agent will endeavour to buy and sell Balancing Gas when it is required.

Also, the price of the 'service' is not changing. The cost of the residual balancing service will be recovered as it is now, through the transport tariff.

What will change is the way in which the value of the good being transported – the Balancing Gas itself – is recovered. There is no trade-off involved here. The good is the same as before. The only issue is whether its cost should be recovered in a targeted way or not.

For these reasons we do not think that price-quality trade-off is a relevant consideration in this instance.



# 4

## Alleged Commerce Act breach

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Greymouth is concerned that certain aspects of the change request may breach the Commerce Act. In particular, Greymouth believes that because the proposal makes the Balancing Agent responsible for purchasing fuel gas, the arrangement:

- may reduce competition for the supply of fuel gas, assuming that the Balancing Agent only buys fuel gas using the BGX. This could breach section 27(1) of the Commerce Act; and
- may exclude the Balancing Agent from purchasing gas from other Welded Parties.

As Greymouth recognises in its submission, Gas Industry Co's MoU with MDL expressly provides that Gas Industry Co performs its role on the basis that it has no responsibility for, and has not enquired into compliance with, the Commerce Act or any other relevant law (MoU, section 7.3(b)). Compliance with the Commerce Act, and with all other relevant law, is the responsibility of parties to the ICAs and TSAs that reference the MPOC.

Accordingly, Gas Industry Co does not need to offer any opinion on Greymouth's Commerce Act concerns, and offers no formal advice on the matter. Subject to that qualification, we would not expect that the change request should breach the Act in the range of normal circumstances envisaged by our process.

# 5

## Claimed errors in analysis

Some submitters believe that Gas Industry Co has made errors in its analysis on the proposal. We consider these views below.

### 5.1 Graph on page 17 of Draft Recommendation

Vector points out some errors in the graph on page 17 of the Draft Recommendation. We acknowledge that some of the values plotted were incorrect. Also, on reflection, we think that the graph over-simplified the allocation of costs. A more comprehensive way of describing the difference between current arrangements and the proposed change is in a table that describes each balancing related transaction and how it will be changed by the proposal. We present this depiction of the effect of the proposal in Table 1.

**Table 1 Balancing transactions**

Transaction	Current practice	Proposed change
<b>Gas purchases and sales on BGX</b>		
	In accordance with Balancing Gas operating instructions and BGX Balancing Gas Master Agreement.	No change
	MDL Sales of Balancing Gas in 2010 MDL Purchases of Balancing Gas in 2010	\$108k (\$1,254k)
	MDL Sales of Balancing Gas in 2011 MDL Purchases of Balancing Gas in 2011	\$159 (\$1,378k)

Transaction	Current practice	Proposed change
<b>Contribution from Incentives Pool</b>		
	<p>Section 12.7 of the MPOC provides that, if there is an Excess Daily Imbalance at a Welded Point for a Day, then the Welded Party of that Welded Point shall incur an Incentives Pool Debit for each GJ of the Excess Daily Imbalance.</p> <p>Section 14.4 provides that the Balancing Agent may make a claim on the Incentives Pool to meet the costs of buying Balancing Gas.</p> <p>The amount obtained by the Balancing Agent from the Incentives Pool will be the product of a quantity and a price. The quantity will be the lesser of the total quantity of Balancing Gas being claimed by the Balancing Agent and the total quantity of Incentives Pool Debits. The price will be the lower of the Daily Incentive Price (DIP) and the cost of Balancing Gas (per GJ). The DIP is the Premium Fuel Value less the Positive Mismatch Price. The Premium Fuel Value is the higher of the Negative Mismatch Price and the GJ equivalent of the electricity spot price during the day. The Negative Mismatch Price and the Positive Mismatch Price are to reflect the Balancing Agent's costs in accessing and disposing of Gas.</p> <p>Current practice is that, when a balancing action is taken, cost recovery will first be sought from the Incentives Pool.</p> <p>Unlike cash-outs, no title transfer occurs when Balancing Gas costs are recovered from the Incentives Pool.</p>	<p>Arrangements discontinued.</p> <p>The Incentives Pool will have no role in pipeline balancing.</p>
	MDL income from Incentives Pool in 2010	\$517k
	MDL income from Incentives Pool in 2011	\$452k

Transaction	Current practice	Proposed change								
<b>Gas purchases and sales from cash-outs</b>										
	<p>Section 12.10 of the MPOC provides that, where there is an Accumulated Excess Operational Imbalance at a Welded Point, MDL may issue an Imbalance Limit Overrun Notice (ILON).</p> <p>If the ILON is not complied within the specified time (which must be at least one day after it is issued), MDL may cash-out the AEOI</p> <p>The price for cash outs must be posted on OATIS at least one day before it is applied. Current practice is to calculate as the weighted average value of 10,000 GJ of either call or put offers on the previous day's intra-day 3 (which occurs at 11am) call or put price stack on the BGX.</p> <p>MDL uses its discretion on when to issue ILONs or cash-out Welded Parties.</p>	<p>ILON arrangements discontinued.</p> <p>Transactions will only occur when a balancing action is taken. In that case the amount will be cashed out to the maximum extent possible against Accumulated Excess Operational Imbalances.</p>								
	<table border="1"> <tr> <td>MDL cash-out sales in 2010</td> <td>\$1,374k</td> </tr> <tr> <td>MDL cash-out purchases in 2010</td> <td>(\$37k)</td> </tr> <tr> <td>MDL cash-out sales in 2011</td> <td>\$1,034k</td> </tr> <tr> <td>MDL cash-out purchases in 2011</td> <td>(\$134k)</td> </tr> </table>	MDL cash-out sales in 2010	\$1,374k	MDL cash-out purchases in 2010	(\$37k)	MDL cash-out sales in 2011	\$1,034k	MDL cash-out purchases in 2011	(\$134k)	
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MDL cash-out purchases in 2011	(\$134k)									
<b>Wash-up through tariff</b>										
	<p>To the extent that there is an over or under recovery of balancing costs in a particular year, MDL will adjust the next year's D2 pipeline tariff to target cost neutrality.</p>	<p>Back to back transactions should lead to very small wash ups.</p>								
	<table border="1"> <tr> <td>Cost over-recovery in 2010</td> <td>\$708k</td> </tr> <tr> <td>Cost over-recovery in 2011</td> <td>\$133k</td> </tr> </table>	Cost over-recovery in 2010	\$708k	Cost over-recovery in 2011	\$133k					
Cost over-recovery in 2010	\$708k									
Cost over-recovery in 2011	\$133k									

This table captures the improvement we believe the change request will bring. In particular, it shows that the complex and inefficient ILON arrangements will be discontinued. These arrangements permit cash-out when no balancing action is taken, set prices before costs are incurred, and allow causers of balancing actions to avoid their cost consequences. The similarly complex and inefficient involvement of the Incentives Pool to fund balancing transactions without any associated title transfer will also be discontinued.

## 5.2 Application of Peaking Limits

Section 3 of the Draft Recommendation compared the proposed changes with current arrangements. In relation to peaking, we said at the top of page 20 that 'The

proposed arrangements extend the Schedule 7 Peaking Limits coverage from Large Stations to apply to all stations.’ Vector pointed out in its submission on the Draft Recommendation that this is incorrect because the Peaking Limits do not apply to Small Stations. Vector suggests that it is more correct to say that the proposed arrangements update the Schedule 7 Peaking Limits for new Large Stations.

We acknowledge this error, and thank Vector for pointing it out. Since we did not rely substantively on this information in our assessment of the proposal, we do not consider the error to be material to our analysis.

### **5.3 Application of Peaking Charges**

On page 31, in Table 2, the second sentence from the top reads: ‘In relation to peaking, we recognise that Vector is likely to be exposed to more cost, but this can and should be dealt with through changes to the VTC to allow that cost to flow through to the Vector Shippers who are responsible for the peaking.’

Vector believes this fails to acknowledge the generally accepted concept that there is insufficient data to allocate peaking costs to responsible parties – it would require the availability of hourly data for all gas users, including households. However, we note that the VTC already contains extensive provisions relating to peaking, and we understand that Vector’s non-VTC contracts also contain peaking provisions. If these provisions are unworkable due to the non-availability of data we find it odd that they would have been written into the VTC. Also, we consider that peaking is most likely to be caused by large users who already have data logging devices that record hourly data. It is reasonable to expect that focusing on these large users would uncover the bulk of peaking activity, without every gas user having to install a data logger. In any case, we consider that, as a diligent TSO, Vector will wish to exercise some constraint on user peaks, and not be deterred by data problems.

We therefore do not think that the assumption we made in the Draft Recommendation, that the allocation of peaking costs can and should be dealt with through the VTC, was unreasonable.

### **5.4 Productive Efficiency analysis**

#### **Likelihood of sub-optimal user behaviour**

Vector suggests the following paragraph should be updated after the numbers in the graph on page 17 of the Draft Recommendation are corrected. The paragraph said:

The current arrangements involve substantial sharing of balancing costs through the transport tariff, so parties who cause a balancing action will not meet the full cost of that action. This distortion is likely to result in sub-optimal behaviour, leading to higher costs. For example, a party who could have balanced its own position at less cost than the Balancing Agent may not do so because it would be cheaper (for that party) to let the cost of the balancing action be spread across all users.

[Draft Recommendation, 1<sup>st</sup> paragraph of section 5.1, p25]

On reconsidering the paragraph we find its conclusion remains valid. Table 2 extracts data from Table 1 to show that in aggregate balancing costs have been over-recovered by between 8% and 66% (average 36%). The resulting over-recoveries would be washed up through the pipeline tariff in subsequent years.

**Table 2 Balancing transaction over/under recoveries**

<b>2010 transactions related to MDL’s BGX Balancing Gas sales</b>		
BGX sales		\$108k
Cash-out		(\$37k)
Over (under) recovery		\$71k 66%
<b>2010 transactions related to MDL’s BGX Balancing Gas purchases</b>		
BGX purchases		(\$1,254k)
Incentives Pool		\$517k
Cash-out		\$1,374k
Over (under) recovery		\$637k 51%
<b>2011 transactions related to MDL’s BGX Balancing Gas sales</b>		
BGX sales		\$159k
Cash-out		(\$134k)
Over (under) recovery		\$25k 16%
<b>2011 transactions related to MDL’s BGX Balancing Gas purchases</b>		
BGX purchases		(\$1,378k)
Incentives Pool		\$452k
Cash-out		\$1,034k
Over (under) recovery		\$108k 8%

So, partly due to the inefficient ILON arrangement (that gives parties who impose a balancing cost on the system an opportunity to avoid that cost, leaving it to be recovered from other system users through Incentives Pool payment and/or cash-outs and/or transport tariffs), and partly due to inefficient Incentives Pool arrangement (that recover some Balancing Gas cost, but do not pass Balancing Gas title), the current arrangements misallocate costs. We therefore can be confident that our conclusion—that current arrangements will promote sub-optimal behaviour—is valid.

## **VTC arrangements for passing through cost**

In the Draft Recommendation, we noted that 'Balancing costs Vector receives (as TPWP) from MDL will be passed through to Vector shippers by means of the Balancing and Peaking Pool (BPP), as at present.' (Draft Recommendation, 3<sup>rd</sup> paragraph of section 5.1, p 25) will depend on the success of Vector's current VTC change request, and changes to its Non-Code Shipper Agreements. We agree that to maximise the benefit from the proposal, changes to the VTC will be necessary. However, absent such changes, we believe that Vector will continue to apply the BPP as at present.

## **Risk of Standard Operating Procedure (SOP) changes**

In relation to MDL's SOP, which sets the thresholds for balancing actions, Vector agrees that there is no change to the SOP as a result of the proposal, but suggests that the introduction of B2B balancing will mean that there will be a greater increase in user risks if there is such a change. We agree, but in the User Risk section of the Draft Recommendation (p 27), we acknowledge that some user risks will increase if the proposal is implemented.

MRP believes that we have not adequately dealt with the inability of shippers to challenge the content of MDL SOPs. We agree with MRP that checks and balances are necessary to protect shipper interests. The current Reasonable and Prudent Operator obligations in the MPOC may not be adequate to do so. However, we consider that this is a matter best discussed between MDL and pipeline users in the first instance. We do not think the proposal directly changes the governance of SOPs although, as discussed above, we have recognised that it does increase user risks to some degree.

## **Claimed benefits of ILON process**

MRP believes that, contrary to Gas Industry Co's view that the overall cost of balancing should not increase, the ILON process allows Shippers an opportunity to adjust their balance positions (albeit crudely). MRP concludes that removing the ILON process will therefore increase balancing costs.

We agree that the ILON process gives a user a choice—to balance its position or be cashed out. There are two scenarios to be considered; where a balancing action has already been taken, and where a balancing action may be taken in the future.

If the Balancing Agent has already taken a balancing action before issuing an ILON, or before the recipient of the ILON decides to balance its own position, then the balancing cost has been incurred and the ILON recipient's decision to balance its own position may reduce its cost, but not the overall cost of balancing the pipeline. Indeed, by clearing its accumulated imbalance to avoid a cash-out, the ILON recipient may force the Balancing Agent to take a balancing action in the opposite direction, further increasing balancing costs.

If the Balancing Agent has not yet taken a balancing action before issuing the ILON, and before the recipient of the ILON decides to balance its own position, then either the Balancing Agent or the ILON recipient can balance. Here the result is ambiguous.

The ILON recipient will balance its own position if it can do so at less than the cash-out price previously posted on OATIS. However, that price may be more or less than the Balancing Agent can obtain on the BGX if the ILON recipient chooses not to balance its own position. So, in this situation the total cost of balancing the pipeline may be more or less.

The ILON is essentially a free option, giving the recipient a choice to remedy its excess imbalance position or not. This is very 'reasonable' from the ILON recipient's point of view, but has the potential to impose costs on other system users, and achieve balancing at higher overall cost. This game, as MRP points out, is further complicated by the fact that mass market retailers do not know exactly what their balance position is until initial allocations are known.

We accept that the proposed change brings greater benefits if mass market quantities are allocated daily, and shippers have access to the balancing market, but it does not follow that the absence of these features makes the ILON process efficient.

## 5.5 Allocative efficiency analysis

### Avoiding the cost of balancing actions

On page 26 of the Draft Recommendation, in the second paragraph under the heading 'Allocative efficiency', we said that under the proposed arrangements users would '...no longer have the opportunity to cause a balancing action and then balance their own position at a later date (within the ILON notice period of grace), leaving others to meet the cost of the balancing action.' Vector suggests that it would be more accurate to say that users would '... have **less** opportunity to cause a balancing action and then balance their own position at a later **time**...'.

Vector points out that, if the proposal is implemented, a user can still cause a balancing action and then avoid meeting the cost of the balancing action by correcting its imbalance position before the end of the same day. We accept that this is true. The proposed peaking charge may deter this kind of behaviour, but we acknowledge that there will still be some loopholes that could allow causers to avoid the costs they impose on the system. This does cause us to somewhat reduce our expectations of allocative efficiency gains.

## 5.6 User risks

### Participation in the balancing market

Vector notes that in the second paragraph of the User Risks section on page 26, the Draft Recommendation refers to Welded Parties being able to participate in the balancing market to hedge their risk. Vector notes that it, as the TPWP, is excluded from the balancing market. We accept that this is true. However we would expect Vector to manage its risk through appropriate pass through arrangements with its system users, rather than attempting to balance those users' positions using the balancing market.



While the proposal exposes the TPWP to greater risk of cash-out, our analysis assumes that Vector, as TPWP, will likely arrange its own affairs to ensure that those costs are allocated to the parties responsible for those cash-outs. We think this is clear from the text of the Draft Recommendation. For example in the fourth paragraph of the User Risks section we say that ‘...Vector, as a TPWP, does not directly control gas flows at its interconnection points. Those flows are determined by downstream gas demand. If the change is implemented, and assuming that the VTC properly allocates balancing costs to Vector shippers, Vector shippers will become more accountable for their balance positions.’ And in the fifth paragraph of the User Risks section we go on to say that ‘The resulting risks are not as unreasonable as the current situation where Parties who have not caused balancing actions are burdened with balancing costs. Vector considers the October 2011 change request to be unfair because it claims that its financial risk is increased. However, Vector also acknowledges that the financial risk can be mitigated through changes to the VTC to address the problems it has identified.’

We therefore consider that Vector, as TPWP, has options other than access to the balancing market to control its risk.

Vector also notes that Gas Industry Co has asked MDL to assist parties to be able to access the Balancing Gas Market, but does not require it. We note that we have no power to insist on such an outcome, even though we believe it would improve the efficiency of the balancing market and enhance the outcomes of the proposed changes. However, this is a matter we addressed in the cover note accompanying the Draft Recommendation, where we propose to request that MDL not implement the change request until 1 June 2013, allowing time for other arrangements to be improved. MDL has since confirmed that it would delay implementation until 1 June 2013. During that time we would assist industry participants to improve their ability to trade Balancing Gas (amongst other matters).

We do not consider that either of the matters discussed above would affect our conclusions on User Risks.

### **Mass market retailers**

MRP considers that Gas Industry Co may not have fully considered that the inability of mass market retailers to manage the higher risk of B2B balancing will lead to higher costs and higher retail prices.

In the Draft Recommendation we noted:

Imposing balancing costs without notice creates risks for users because the quantity and price of imbalances are uncertain. At the extreme, higher risks might lead market players to question whether the rewards are sufficient to justify continued participation in the market. Higher risks might also lead to higher retail margins and hence higher retail prices.

[Draft Recommendation, 4.1, p25]

In section 5.1 of the Draft Recommendation we analysed these concerns. However, we also specifically addressed the cost consequences of the increased risk situation in Section 5.2:

Both the MPOC and the VTC require pipeline users to maintain balanced positions, these obligations to balance are unchanged by the October 2011 Change Request. Users should currently have systems in place to comply with these obligations. However, since the October 2011 Change Request will ensure that users who cause a balancing action face the full cost consequences, there is a greater incentive to be vigilant. This greater incentive could potentially increase investment in information systems and operations (this is discussed in Section 5.1, User Risks).

Because the cost of increased monitoring arises from an existing obligation, we do not think it should be counted against the proposed change. It is a cost that is inherent in the original conception of the pipeline access arrangements, but which poor cost allocation practices have allowed some users to avoid.

[Draft Recommendation, 4.1, p25]

We think that the Draft Recommendation does properly consider user risk and the cost consequences of a move to B2B balancing. It also noted the wide scope for improving other industry arrangements to contain these risks and costs.

# 6

## New matters raised

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A summary of all the matters raised in submissions is provided in Appendix A. One new matter raised which is relevant to the analysis of the change request. We discuss it here.

### 6.1 Climate change and security of supply

Greymouth claims that the significant tightening of gas management that will occur if the change request is implemented may cause some instances of end users flaring gas. It suggests this would contradict the objective set out in section 12 e of the GPS:

The gas sector contributes to achieving the Government's climate change objectives as set out in the New Zealand Energy Strategy, or any other document the Minister of Energy may specify from time to time, by minimising gas losses and promoting demand-side management and energy efficiency.

In addition, Greymouth claims that the outcome will be inconsistent with section 43ZN (b)(v) of the Gas Act, which requires that:

...risks relating to security of supply, including transport arrangements, are properly and efficiently managed by all parties

Greymouth believes that demand side management is most efficient when upstream security of supply arrangements provide adequate downstream flexibility.

We think this circumstance would be unlikely. The scenario that Greymouth proposes is one where a supplier performs to nominations, but the end-user being supplied expects to take less gas than nominated. It is assumed that the end-user is too late to re-nominate a lower amount. Greymouth goes on to say:

This leaves the end-user with one of two options: be cashed-out or use the gas. Some might argue that being cashed-out is a fair allocation of cost to causer. Notwithstanding this argument though, the end-user will conduct a cost-benefit analysis. Depending on the numbers, in some circumstances it might be more economic for the end-user to take some extra gas and put it to flare to minimise their back-to-back balancing exposure.

We do consider that, if the end user causes a balancing action, then it is efficient for the end user to be cashed out. In Greymouth's example, the balancing action would have been for the Balancing Agent to sell gas, and to make a back-to-back purchase of that gas from the end-user. We do not see why the end user would wish to flare gas rather than leaving it in the pipeline and allowing the Balancing Agent to sell it.

Normally, it would be better for the end-user to receive some money for the gas rather than to flare it. It would only make sense to flare in the event that the Balancing Agent had to pay money to get rid of the gas, and bought it off the end-user at a negative price.

In summary, Greymouth's scenario would only result in gas being flared in a circumstance where:

- the pipeline was sufficiently out of balance to require that the Balancing Agent sells gas to keep linepack below its upper limit; and
- the end-user was too late to re-nominate its reduced needs; and
- the price for Put gas was negative; and
- there was no other constraint on the end-user that would prevent it from flaring gas.

This seems too remote a possibility to be given much weight in our analysis. We believe that the best means of ensuring efficient outcomes is for prices to reflect costs, and for market participants to be responsible for the costs they cause.

# 7

## Final recommendation

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Gas Industry Co has assessed whether any information contained in submissions on its Draft Recommendation would make the conclusions of that paper invalid. We find that:

- none of the claimed procedural breaches causes serious concern (section 3);
- the alleged Commerce Act breach is not within our ambit (section 4);
- claimed errors in our analysis, while valid in a number of cases, are not of sufficient moment to unsettle the overall conclusion (section 5); and
- the one new matter raised, relating to climate change and security of supply, proposed outcomes that seemed too remote a possibility to be given great weight (section 6).

Gas Industry Co's Final Recommendation is therefore to support the October 2011 change request.

# Glossary

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**Note:** Definitions obtained from the MPOC are shown in *italics*.

AEOI	'Accumulated Excess Operational Imbalance'. A defined term in the MPOC for amount of OI in excess of tolerance.
Balancing	The management of Line Pack to ensure that it remains within acceptable operational limits.
Balancing Agent	Defined by the MPOC as ' <i>...the balancing agent appointed by MDL from time to time to manage the Line Pack.</i> ' The October 2011 change request does not propose changing this definition.
Balancing Gas	Defined in the current version of the MPOC as ' <i>...Gas used to manage Line Pack on a Transmission Pipeline.</i> ' The October 2011 change request proposes changing this to ' <i>... Gas purchased as part of a Balancing Gas Call, or sold as part of a Balancing Gas Put, by MDL.</i> '
B2B balancing	'Back to back balancing' refers to arrangements that allocate gas transactions taken by the Balancing Agent among Welded Parties with imbalance positions outside tolerance.
BGX	'Balancing Gas Exchange', an online platform that facilitates the trade of Balancing Gas on the Maui Pipeline.
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 forcible sale or purchase of gas by the TSO to resolve an outstanding imbalance position.
GPS	'Government Policy Statement'.
ILON	Defined in the current version of the MPOC as ' <i>...a notice given by MDL to a Welded Party under section 12.10 requiring that Welded Party to reduce its Accumulated Excess Operational Imbalance to zero, and which states the quantity of, and a time period for reducing, that excess.</i> ' The October 2011 change request proposes to delete this definition and all references to ILONs in the MPOC.

Imbalance	Generically this means the flows into the pipeline do not match the flows out of the pipeline. This can be 'operational imbalance' in the MPOC which is the difference in scheduled flows and actual flows at an interconnection point. This can also be the difference between shipper receipt and delivery quantities in both the MPOC and VTC (where it is called 'mismatch'). A positive imbalance is one that increases Line Pack and a negative imbalance is one that decreases Line Pack.
Incentives Pool	<p>Defined by the MPOC as '<i>...the pool of money held on trust and administered by the Incentives Pool Trustee, into which all Incentives Pool Debits are to be paid and out of which Incentives Pool Claims are to be paid.</i>' The October 2011 change request does not propose changing this definition.</p> <p>The Incentives Pool is essentially a liquidated damages arrangement that permits a Welded Party, who suffers damage as a result of another Welded Party being out of balance, to claim liquidated damages.</p>
MDL	Defined by the MPOC as ' <i>Maui Development Limited.</i> ' The October 2011 change request does not propose changing this definition.
MPOC	'Maui Pipeline Operating Code', the current version of which is dated 1 September 2011.
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.
OI	'Operational Imbalance'. The MPOC defines OI as being the difference between the actual quantity of gas that flowed through a welded point on a day and the scheduled quantity for that day.
Peaking Charge	An incentive/penalty charge proposed to apply to Welded Parties whose demand peaks outside proposed Schedule 7 limits, and calculated in accordance with a proposed Section 13.4.
ROI	'Running Operational Imbalance'. A defined term in the MPOC for the aggregate of imbalance at a welded point over time and therefore represents the total gas parked or loaned from the pipeline at that point. The October 2011 change request does not propose changing the definition.

ROIL	'Running Operational Imbalance Limit'. A defined term in the MPOC for tolerance of ROI, outside of which MDL may notify the welded party to take away or return the excess imbalance (see ILON). The October 2011 change request does not propose changing the definition.
RPO	'Reasonable and Prudent Operator'. A defined term in the MPOC referring to a standard for performance equal to or better than good industry operating practice relative to recognised international practice. The October 2011 change request does not propose changing the definition.
Shipper	A pipeline user that has contracted for the TSO to transport gas (see TSA).
tolerance	An amount of the peak daily flow, DOIL or ROIL (depending on the context) as set in Schedule 7 of the MPOC, below which Welded Parties can operate without consequences.
TSA	'Transmission Service Agreement'. The contract between a shipper and the TSO to transport gas.
TPWP	'Transmission Pipeline Welded Party'. A Welded Party that controls an open access transmission pipeline. Currently Vector is the only TPWP.
UFG	'Unaccounted-for-Gas'. This is a change in Line Pack that cannot be identified to a user, and represents the inherent errors in metering gas.
VTC	'Vector Transmission Code'.
Welded Party	Defined by the MPOC as ' <i>...the person named as a welded party in a valid and subsisting ICA.</i> ' The October 2011 change request does not propose changing this definition.



# Appendix A Summary of submissions on Draft Recommendation

Gas Industry Co's contractual role under the MPOC is limited to making a recommendation to support a change request (or not). It does not provide for conditional support. All Gas Industry Co's comments below should be read with this in mind.

Submitter	Submitters comment	Gas Industry Co comment
Contact	Contact is not confident that the change request will result in sufficient improvement.	We accept that there is some uncertainty, but we believe the change will be a catalyst for further improvements.
	Contact believes the level of cost socialisation in current arrangements is acceptable until similar changes are made to Vector regime.	We agree that coordinated MPOC and VTC change would be ideal and believe that this can be achieved in the time available (MDL will not implement the change until 1 June 2013).
	Contact considers that small, incremental changes have already reduced costs. Submissions make it clear that the proposal will 'over engineer' a solution and bring uncertainty and more cost.	The current [relatively low] balancing charges are not necessarily a good indicator of future charges. While we understand that most shippers are comfortable with the status quo, we have assessed the change request with reference to Gas Act and GPS objectives. The inefficiency of current arrangements is not consistent with those objectives. Also, the proposed change will considerably simplify arrangements. We do not consider this as 'over engineering'.
	Contact considers that the focus should be on improving Vector's regime through the Gas Transmission Investment Programme.	The Gas Transmission Investment Programme is essentially about the efficient use of existing capacity and investment in new capacity. It is unlikely to address balancing issues. While we accept that industry resources are limited, we consider that the pace of change is not rapid, and small incremental changes are better than further delay.
	In Contact's view, the interaction of B2B with the Vector regime may increase costs. This has not been properly considered by Gas Industry Co.	Implementing the MPOC changes will be a catalyst for changing the VTC. Vector and its shippers should be motivated to ensure that this is done in a way that does not increase costs.

Submitter	Submitters comment	Gas Industry Co comment
Genesis Energy	Because balancing arrangements have been reviewed and debated for a number of years Genesis Energy believes it is important to progress the change request to enable improvements.	We agree.
	Genesis Energy supports delayed implementation to allow time to progress work on the Balancing Gas exchange and Frankley Road nominations, and offers assistance with that work.	Noted.
Greymouth	Greymouth does not believe that a balancing issue currently exists, and therefore no solution is required.	Gas Industry Co has extensively reported and analysed shortcomings in current balancing arrangements. From Greymouth's submissions on our various balancing review consultation papers, we believed that Greymouth also considered balancing to be a significant issue. It does not appear to us that the issues identified in that review have been addressed.
	Greymouth considers that there have been a number or process breaches which Gas Industry Co must address with urgency.	We address the alleged breach in section 3 of this Final Recommendation.
	Greymouth considers that some aspects of the proposal may reduce competition for the supply of fuel gas, raising Commerce Act concerns.	We address this concern in section 4.
	Greymouth considers that a possible outcome of implementing the change request could be end-users flaring gas.	We address this concern in section 5.
Mighty River Power	MRP considers that because mass market retailers cannot effectively manage the increased risk of moving to B2B balancing, their costs will increase and be reflected in increased prices to end users. Gas Industry Co has not fully considered this.	We address this concern in section 5.
	Contrary to Gas Industry Co's view that the overall cost of balancing should not increase, MRP considers the ILON process allows Shippers an opportunity to adjust their balance positions (albeit crudely). Removing the ILON process will therefore increase balancing costs.	We address this concern in section 5.

Submitter	Submitters comment	Gas Industry Co comment
	MRP supports further work to introduce a daily allocation process.	Noted.
	MRP notes that the Draft Recommendation did not address the risk of MDL Standard Operating Procedures.	We address this concern in section 5.
Vector	Vector does not support the change request or Gas Industry Co's draft recommendation to support it.	Noted.
	Vector sets out a series of suggested changes to MDL's proposal that would make it acceptable to Vector.	The suggested changes would substantially alter the change request. Since we can only propose minor and technical changes, we do not consider the merits of Vector's proposed amendments.
	Vector notes that it has given MDL notice, under the parties' Interconnection Agreement, of the material adverse effects the proposal would have on Vector. Specifically: <ul style="list-style-type: none"> <li>o a reduction in Vector rights and increase in Vector costs</li> <li>o the peaking mechanism will not pass cost to causers</li> </ul>	We acknowledge that Vector is dealing with this in the context of its Interconnection Agreement with MDL.
	The proposal does not provide the fundamental rethink necessary to incentivise all parties to act efficiently.	The industry has spent a number of years working on a fundamental understanding of balancing and the improvements that are necessary. However, it seems that the most likely means of achieving these improvements is through incremental changes.
	Vector specifically comments that: <ul style="list-style-type: none"> <li>o the graph on page 17 of the Draft Recommendation is inaccurate, and overestimates the percentage of socialised costs.</li> <li>o Peaking Limits do not apply to Small Stations as the Draft Recommendation states.</li> </ul>	These, and related matters, are dealt with in section 5.