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Ian Wilson

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Dear Ian

Transmission Pipeline Balancing: MPOC 17 December 2009 Change Request Draft Recommendation

1. Vector Gas Limited, On Gas Limited and Vector Gas Contracts Limited (Vector) welcome the opportunity to comment on the MPOC 17 December 2009 Change Request (Change Request) Draft Recommendation.

Vector's Position

The Change Request provides no improvement

2. The Change Request does not provide an improvement to the status quo. It:
 - a. Is piecemeal in approach;
 - b. Retains many of the deficiencies of the current MPOC balancing regime;
 - c. Seeks to improve MDL's position to the detriment of other industry participants, including Vector;
 - d. Increases industry participants' risks whilst reducing their mitigation and self-balancing tools;
 - e. Will likely result in a decline in system security;
 - f. Will likely increase industry participants' costs;
 - g. May reduce competition;
 - h. Is completely unbalanced in its approach to risk allocation;
 - i. Fundamentally changes the basis on which Vector agreed to facilitate open access and entered into its ICA; and
 - j. Will introduce significant instability to industry arrangements.

MPOC and Memorandum of Understanding

3. The GIC's role under section 29 of the Maui Pipeline Operating Code (MPOC) is to consult on the Change Request and then make a formal written recommendation either supporting or not supporting the Change Request.
4. A memorandum of understanding (MOU) between the GIC and MDL specifies the process the GIC (vis-à-vis MDL) must undertake when assessing the Change Request.

Approach and Criteria

Gas Act, GPS and other relevant criteria

5. When analysing a Change Request the GIC must have regard to the objectives of the Gas Act 1992 (Gas Act) and the 2008 Government Policy Statement on Gas Governance (GPS), and, in certain circumstances, it must also produce a cost-benefit analysis.
6. The GIC's analysis is not however limited to the Gas Act and GPS – it can, and where appropriate should, take into account other relevant matters.

Evaluation against status quo and current environment

7. Importantly, a Change Request must be evaluated against the current environment and against current versions of the MPOC, Vector Transmission Code (VTC) and other relevant industry bi-lateral contracts. It would not be appropriate for the GIC to assume a change to the current environment in response to a proposed Change Request when evaluating that Change Request. In this case, the GIC must therefore assess the Change Request in the context of the current VTC and associated bi-lateral transmission contracts.
8. The GIC's Draft Recommendation appears to assume that the Change Request will have certain flow on effects, in particular, for Shippers on the Vector Transmission System and on end users. In so doing, we believe the GIC has inappropriately assumed changes to the VTC and bi-lateral transmission contracts.
9. Vector has operated an open access regime on its pipelines since 1995. In 2005, after great time and effort, Vector amended its regime specifically to enable MDL to operate an open access regime on the Maui Pipeline. These amendments secured access to the Maui Pipeline for the industry. In 2007, after further expense and effort and at the behest of the industry, Vector further linked its regime to the MPOC and specifically to the concepts utilised under MDL's OBA regime. This linkage is so complete that if the Change Request is supported by the GIC, and implemented by MDL, it is likely that Shippers on Vector's Transmission System will argue that balancing costs invoiced to Vector by MDL cannot be passed on to them.
10. The GIC's analysis therefore needs to factor in those costs being either borne by Vector and/or, to the extent possible (mindful of the Commerce Amendment Act restrictions on Vector), being socialised (in addition to current transmission charges), through posted prices to those Shippers with Reserved Capacity.

Vector has no ability to unilaterally ensure the sharing of costs across those Shippers with historical (and bi-lateral) non-VTC transmission agreements or Supplementary Capacity.

Balancing vs Non-Balancing Changes

11. When evaluating the Change Request the GIC has divided the Change Request into balancing and non-balancing related changes and rated the balancing changes against the Gas Act and GPS objectives of efficiency, cost and governance. Vector is unsure why the GIC has not conducted a similar assessment in respect of the non-balancing aspects of the Change Request but is firmly of the view that such an evaluation needs to be completed for the GIC to adequately complete its role under the MPOC and MOU. We have endeavoured to do so in our assessment below.

Assessment

The GIC must consider the Change Request in its entirety and against the status quo

12. The GIC can only support the Change Request if, when assessed in its entirety, it would result in an improvement on the status quo for the industry.
13. Vector does not believe the facts demonstrate an improvement on the status quo for the industry and to assist the GIC with its process, Vector has completed a further assessment of the Change Request utilising the GIC's evaluation structure.

Category	Vector Comments	Marginal Benefit of December Change Request +5=strong benefit -5=strong detriment
Efficiency - Productive	<p>The Change Request does not improve productive efficiency. Specifically, it:</p> <p><i>Does not promote competition in the balancing gas market</i></p> <p>a. Currently, the balancing gas market is restricted to participants directly connected to the Maui Pipeline and excludes many parties connected to the Vector Transmission System who are physically able and well located physically to offer a balancing service. The effect of this is to limit competition in the market leading to a higher cost to all participants. The Change Request does not address this deficiency and therefore does not further promote competition in the balancing gas market.</p> <p><i>Does not ensure that balancing gas is purchased only to the extent necessary</i></p> <p>b. Currently, MDL retains sole discretion over the standard operating procedures which set the criteria for when balancing gas will be purchased or sold and to what extent. The Change Request sets out some principles that the Balancing Operator must use reasonable endeavours to follow but these do not cover when balancing gas will be purchased or sold and to what extent. Consultation on the standard operating procedures would be codified but that does not in any way guarantee influence over content or provide an assurance that the content will be efficient.</p> <p>c. The MPOC currently contains an incentives pool mechanism which is utilised to recover balancing costs with no resulting transfer of title for Gas bought or sold. The retention of this mechanism in the Change Request ensures that costs are recovered by the balancing operator but with the associated imbalance remaining – leading to an increased likelihood of a further balancing action and a further separation between cause and cost. We give an example in Appendix A to show how this is both productively and allocatively inefficient.</p> <p>d. No provision currently exists in the MPOC for the treatment of operational gas, such as UFG. The Change Request also does not include one – meaning on some days this imbalance could involve recovery from the</p>	-0.5

Category	Vector Comments	Marginal Benefit of December Change Request +5=strong benefit -5=strong detriment
	<p>incentives pool mechanism, leading to increased productive inefficiency.</p> <p><i>Removes incentives for the maximum use of inherent Line Pack flexibility</i></p> <p>e. MDL's standard operating procedures for balancing gas have been amended purportedly to increase the utilisation of inherent Line Pack for balancing purposes. The number of balancing gas transactions taken has reduced as a result but it has also led to decline in energy system security (see the section on Efficiency – Security for more details on the security implications). MDL retains sole discretion over the content of the standard operating procedures under the Change Request. If the Change Request is implemented and full cost recovery is guaranteed by mechanisms such as pay now, dispute later, the incentive on MDL to reduce the number of balancing transactions is removed hence there is no guarantee that the utilisation of the maximum use of inherent Line Pack will continue.</p>	
Efficiency - Allocative	<p>The Change Request does not in general improve allocative efficiency. Specifically it:</p> <p><i>Improves the match between the marginal price of balancing gas and the marginal value of the gas but does not provide a common price for all balancing actions</i></p> <p>f. Under the current ILON process there is no direct alignment between balancing gas costs to the balancing operator and balancing gas costs to users. As indicated by MDL in their recent notification of Maui transmission fees from 1 July 2010, balancing gas costs have been over-recovered in the last year. Moving to a cash-out price to accurately reflect the cost of providing balancing gas should provide an allocative efficiency benefit.</p> <p>g. However this relationship between cost incurred and cost recovery is not as good as it needs to, and can, be. Both the current regime and the Change Request provide for two prices for balancing gas – one pursuant to the cash-out mechanism and the other pursuant to the incentives pool mechanism, which of course involves</p>	-2

Category	Vector Comments	Marginal Benefit of December Change Request +5=strong benefit -5=strong detriment
	<p>the incentives pool debit price – a price which is completely unrelated to the cost of the balancing gas. Retaining the incentives pool debit price thus does not improve allocative efficiency.</p> <p><i>Does not ensure that the cost of balancing is borne by the causers</i></p> <ul style="list-style-type: none"> h. The introduction of back-to-back cash-outs does not ensure that the cost of balancing is borne by causers. Further, this introduction in the absence of linked nominations and associated rights means cost allocation will be less allocatively efficient. i. By way of example, currently if a participant is curtailed or suffers a force majeure event on a day, they could cause an imbalance large enough to require a balancing action but correct their position by the end of the day – meaning that no ILON would likely be issued and no costs would flow to that causer. j. Under the Change Request, this causer would still avoid costs but other parties with imbalance in the direction of the cash-out would not. They would be cashed-out and potentially face incentives pool charges. k. The introduction of a back-to-back balancing regime in isolation is therefore detrimental to allocative efficiency. By contrast, if back-to-back balancing was introduced along with linked nominations, then a participant who suffers a curtailment or force majeure event could revise their nominations without waiting for the next intra-day cycle and avert the need for a balancing action. As well as not detrimentally impacting allocative efficiency, this would also improve productive efficiency. A worked example showing this is outlined in Appendix B. l. The Change Request removes MDL’s current obligation to correct balancing charges to account for metering or any other errors. Costs will therefore not be borne appropriately and this is clearly detrimental to allocative efficiency. 	

Category	Vector Comments	Marginal Benefit of December Change Request +5=strong benefit -5=strong detriment
	<p><i>Lessens users' ability to self balance</i></p> <ul style="list-style-type: none"> m. Currently, users have access to tools such as ILONs, tolerances and combined tolerances to aid them to self balance. Section 12.9 of the current MPOC, also only requires Welded Points be managed to tend Running Operational Imbalance towards zero over a reasonable period of time. n. By contrast, the Change Request requires Welded Points to be managed to tend Running Operational Imbalance to zero "at all times". This requirement together with the removal of key tools for self-balancing will favour larger parties who have hourly metering and who are better able to manage their imbalance. It will not lead to greater allocative efficiency. o. If a curtailment occurs, MDL has the discretion to decide whether to perform a one-sided curtailment of receipts or deliveries and place Maui Shippers into mismatch. Under the current MPOC, Maui Shippers would receive a mismatch notice and have the opportunity to repay the Gas into the pipeline over a period of time. Under the Change Request, Maui Shippers could be put into mismatch on a day and only receive notification of that mismatch the following day – thus making it impossible for the Maui Shipper to seek to rectify the issue at a cost to that Shipper less than the resulting balancing transaction. 	
Efficiency - Security	<p>The Change Request does not improve security efficiency. Specifically it:</p> <p><i>Requires Running Operational Imbalance to tend to zero at all times</i></p> <ul style="list-style-type: none"> p. Under the current regime, Welded Points must be managed to tend Running Operational Imbalance towards zero over a reasonable period of time. By contrast, the Change Request requires Welded Points to be managed to tend Running Operational Imbalance to zero "at all times". To do this, Vector would need to ensure that only the Scheduled Quantity was taken at its Welded Points – this would result in curtailments and a breach of Vector's service obligation under the VTC. These curtailments would impact all Vector 	-3

Category	Vector Comments	Marginal Benefit of December Change Request +5=strong benefit -5=strong detriment
	<p>Shippers, including power stations, and have a detrimental effect on energy system security.</p> <p><i>Introduces incompatibility between the open access regimes that will threaten security</i></p> <p>q. The changes proposed in the Change Request mean that: (i) Vector's TSAs are no longer compliant with the principles set out in Schedule 9 and section 2.14 of the MPOC; and (ii) if Gas is shipped to the TP Welded Points in the absence of a compliant TSA any loss associated with that will now be borne by Vector. These are profound changes and put the transport of any Gas to the TP Welded Points directly at risk. Shippers cannot ask for Gas to be transported without a compliant TSA.</p> <p><i>Provides no long-term assurances that the standard operating procedures will minimise the number of times the Line Pack is outside these thresholds</i></p> <p>r. As mentioned previously MDL currently has and, under the Change Request will continue to have, complete control over the content of the standard operating procedures. The retention of this discretion does nothing to improve security efficiency.</p>	
<p>Efficiency – User risks</p>	<p>The Change Request does not improve the efficiency of user risks. Specifically it:</p> <p><i>Lessens users' ability to self-balance</i></p> <p>s. As noted under "allocative efficiency", the Change Request removes users' tools to self balance such as removing the ILON mechanism and removing tolerances and combined tolerances. As well as not providing an allocative efficiency benefit, this also increases user risks.</p>	<p>-3</p>

Category	Vector Comments	Marginal Benefit of December Change Request +5=strong benefit -5=strong detriment
	<p><i>Restricts the number of participants in the balancing gas market</i></p> <p>t. When user risks are increased, tools to mitigate risk become increasingly important. As noted earlier, the Change Request only allows parties directly connected to the Maui Pipeline to participate in the balancing gas market. As well as being detrimental to competition, this prevents users from entering into the market to mitigate the impact of balancing costs and has an adverse effect on user risk.</p> <p><i>Is potentially damaging to smaller market participants</i></p> <p>u. As well as retaining MDL's right to determine the standard operating procedures and therefore when and in what circumstances a balancing action will be taken, the Change Request does not cap the price of balancing gas. This could lead to a very large transaction occurring which could be detrimental to an individual shipper. As this risk is uncapped it may inhibit new entrant entry into the market. User risk is therefore increased.</p> <p><i>Does not improve the provision of timely imbalance information to users</i></p> <p>v. The Change Request does not change the availability of timely imbalance information to users. Imbalance information at an aggregate level is already available. Improvements in this area can, of course, be made via nominations and virtual welded points, but these concepts are not contemplated by the Change Request. Therefore there is no change in user risks due to the provision of information.</p> <p><i>Permits isolation of increased costs to Vector or increased socialisation of costs</i></p> <p>w. As noted above, on the subject of balancing the content of the VTC is inextricably linked with the current MPOC. If the Change Request is supported and implemented Shippers on Vector's Transmission System will likely argue that balancing costs invoiced to Vector by MDL cannot be passed on to them. Those costs will</p>	

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	<p>then either be borne by Vector and/or, to the extent possible (mindful of the Commerce Amendment Act restrictions on Vector), be socialised (in addition to current transmission charges), through posted prices to those Shippers with Reserved Capacity. Vector has no ability to unilaterally ensure the sharing of costs across those Shippers with historical (and bi-lateral) non-VTC transmission agreements or Supplementary Capacity. This is a significant additional user risk.</p>	
<p>Cost – Agreement</p>	<p>The Change Request has little effect on agreement cost. Specifically it:</p> <p><i>Increases the cost of consulting on the standard operating procedures</i></p> <ul style="list-style-type: none"> x. The Change Request (if only assessed in the confines of the MPOC) will have few agreement costs other than the cost to the industry of consulting on the standard operating costs. However this change only formalises the industry's expectations and MDL's current working practice, so it provides no increase or decrease in cost. y. Other agreement costs will result if changes to the VTC and other bi-lateral transmission agreements are required – we discuss these below under the Implementation heading. 	<p>0</p>
<p>Cost - Implementation</p>	<p><i>The Change Request will have significant implementation costs. Specifically it</i></p> <p><i>Could have significant IT and process costs</i></p> <ul style="list-style-type: none"> z. Due to the large amount of change in the Change Request, Vector believes there could well be significant IT and process costs involved in its implementation. 	<p>-3</p>

Category	Vector Comments	Marginal Benefit of December Change Request +5=strong benefit -5=strong detriment
	<p><i>Will have significant VTC Change Request and TSA Deed of Amendment costs</i></p> <p>aa. Whilst no VTC Change Requests have been lodged to date, it would not be unreasonable to assume that a good number could be necessary if the MPOC Change Request was implemented. This will result in significant costs associated with drafting, review and possibly appeal to the GIC. Vector's Non-Code Shipper agreements would also need to go through an amendment process – which as has been noted in previous submissions is an extremely expensive process.</p> <p><i>Could have significant costs associated with organisational and procedural changes</i></p> <p>bb. Since the Change Request introduces many changes to the regimes users will need to review and amend their procedures to manage this different risk. Participants may require staff on the weekends to manage the increased risk. This comes at a cost and may involve the loss of existing staff.</p> <p>cc. The Change Request is likely to impose significant implementation costs on the industry. In the analysis carried out by NZIER regarding the balancing rules, NZIER modelled the implementation costs of a code based solution as \$1.8m. A good proportion of that cost could be applicable under the Change Request too.</p>	
Cost - Operating	<p>The Change Request could have significant operating costs. Specifically it:</p> <p><i>Could have significant costs associated with organisational and procedural change</i></p> <p>dd. See paragraphs bb and cc above.</p>	0
Governance - Transparency and non-	<p>The Change Request does not improve transparency and non-discrimination. Specifically it:</p>	0

Category	Vector Comments	Marginal Benefit of December Change Request +5=strong benefit -5=strong detriment
discrimination	<p><i>Does not increase the availability of information</i></p> <p>ee. While the Change Request codifies the availability of the standard terms and conditions for balancing gas, price stacks for balancing gas and real time metering information for each Welded Point, this information is already provided on the BGX so the availability of information is not improved by the Change Request.</p> <p><i>Does not improve users' ability to influence the standard operating procedures</i></p> <p>ff. Although the Change Request provides for consultation on the standard operating procedures this only codifies current practice and does not allow users to directly influence the standard operating procedures. Users also do not have the ability to request changes to the standard operating procedures and it is possible that the standard operating procedures could be written to favour some parties over others. The current regime does not guarantee non-discrimination and the Change Request does not improve this.</p> <p><i>Does not provide transparency of the separation between operational and balancing gas</i></p> <p>gg. Neither the status quo nor the Change Request deal with imbalance associated with operational gas.</p>	
Governance - Adaptability	<p>The Change Request has little effect on adaptability. Specifically it:</p> <p><i>Aligns the MPOC with current practice</i></p> <p>hh. The MPOC is silent on the standard operating procedures, however MDL already consults with the industry on their content so this change merely codifies, but does not enhance, current practice. In order to improve adaptability, the standard operating procedures would need to be subject to a thorough change request process. The Change Request therefore does not improve adaptability.</p>	0

Category	Vector Comments	Marginal Benefit of December Change Request +5=strong benefit -5=strong detriment
Governance - Enforcement	<p>The Change Request has a detrimental effect on enforcement. Specifically it:</p> <p><i>Reduces incentives on MDL and Shippers to resolve disputes</i></p> <p>ii. The Change Request amends Vector’s current “pay when paid” right to a “pay now, dispute later” obligation. With cash in the hand, MDL will not be incentivised to quickly resolve any disputes. Shippers on the Vector Transmission System who dispute whilst withholding cash will also not be incentivised to quickly resolve disputes. This is a fundamental issue.</p>	-2
Governance - Balance	<p>The Change Request has a significant detrimental impact on balance. Specifically it:</p> <p><i>Materially alters the basis on which Vector facilitated open access on the Maui Pipeline and entered into its ICA under the MPOC</i></p> <p>jj. When the MPOC was negotiated it was done so as a package and in a manner so as to ensure that there was a balanced allocation of risk and cost. Vector wanted to facilitate open access on the Maui Pipeline for the industry but only executed its ICA after it (and the MPOC) included a set of key (and fundamental) terms relating to: (a) financial exposure (pay when paid, full recovery of costs); (b) mitigation of risk (ILON processes, balancing gas provisions); (c) negotiated welded point tolerances (including combined tolerances); and (d) negotiated allocation of liability (including indemnities). Open access on OBA terms would not have been possible without Vector’s agreement. The Change Request removes all of the key terms on which Vector relied when it agreed to facilitate open access and sign an ICA. It also leads to a very skewed risk allocation – and is not balanced. More specifics follow.</p>	-4

Category	Vector Comments	Marginal Benefit of December Change Request +5=strong benefit -5=strong detriment
	<p><i>Removes Vector's right to recover costs associated with it being the TP Welded Party under an OBA</i></p> <p>kk. The Change Request removes Vector's protection against Gas being shipped with a compliant TSA and GTA. This puts Vector at risk of not being able to recover balancing charges.</p> <p><i>Introduces a "pay now dispute later" regime on the Maui Pipeline</i></p> <p>ll. Under the current regime, Vector faces all of the costs associated with chasing outstanding invoices and resolving balancing related disputes. This is retained by the Change Request. However the introduction of the "pay now, dispute later" mechanism now transfers the risk of non-recovery on disputes to Vector.</p> <p><i>Amends the indemnity in section 2.15 to materially increase Vector's risk</i></p> <p>mm. As well as affecting system security, as noted above, the changes to section 2.15 materially affect the balance of risk between the TSOs. MDL has removed its obligation to confirm that Shippers have appropriate contracts in place before shipping to a TP Welded Point at the same time as transferring the liability for loss if this occurs to Vector. This has the affect that MDL could allow nominations to a TP Welded Point for a Shipper that Vector has no compliant contractual relationship with, and Vector would have no ability to recover balancing or other costs from this Shipper and no ability to recover its loss from MDL.</p>	

Category	Vector Comments	Marginal Benefit of December Change Request +5=strong benefit -5=strong detriment
Governance - Stability	<p>The Change Request has a detrimental impact on stability. Specifically it:</p> <p><i>Does not achieve an optimal outcome and counter Change Requests are likely</i></p> <p>nn. Changes to regimes are costly and time consuming to implement. As such they should absolutely improve the status quo and not be put in place in a piecemeal fashion to ensure stability. It is highly likely that this Change Request, if approved and implemented, will result in litigation and be replaced quickly with one that truly improves the position for the industry.</p>	-2
Overall benefit from December Change Request <u>not demonstrated</u>		

Concluding Comments

14. Vector appreciates that it has included information in this submission on affects under the VTC. Please feel free to contact Katherine Shufflebotham if this information requires further explanation or you would like us to clarify any other matter raised.
15. We have limited the content of this submission to the Change Request and the Draft Recommendation. Early next week, we will also be writing to the GIC to outline the benefits that Rules would give rise to over this Change Request, or indeed a series of balancing Change Requests.

Kind regards

A handwritten signature in blue ink that reads "John Rampton". The signature is written in a cursive style with a large, looping initial 'J'.

John Rampton

Manager Industry Governance and Policy

Appendix A: Increased volatility on the day, due to the proposed Change Request creates worse outcomes for parties

Status quo

	Opening ROI GJ	AEOI GJ	SQ GJ	MQ GJ	ROI at midday GJ	Balancing Gas purchase GJ	ROI at midnight GJ	Cash out allocation GJ	End of Day ROI GJ	EDO1 GJ
Welded Point A	0		50,000	50,000	-10,000		0	0	0	0
Other Welded Points	2,000		20,000	23,000	2,000		-1,000	0	-1,000	0
Total	2,000	5,250	70,000	73,000	-8,000	5,000	-1,000	0	-1,000	0

Cost of balancing gas	\$/GJ	\$ 10.00
Cost to balancing operator	\$	\$ 50,000
Incentives Pool Claim	\$	\$ -
Incentives Pool Debit Price	\$/GJ	\$ -

Balancing Costs

Welded Party A	\$	\$ -
Other Welded Parties	\$	\$ -

Summary

In this example Welded Party A has an unplanned maintenance outage during the day at its Welded Point. By the end of the day has been rectified. Even though it is the activities at Welded Point A that caused the line pack to go outside tolerances and balancing gas to be purchased, there are no daily or running imbalances outside of tolerances at the end of the day. Balancing costs in this example are socialised and no ILONs are issued.

Back-to-back

	Opening ROI GJ	AEOI GJ	SQ GJ	MQ GJ	ROI at midday GJ	Balancing Gas purchase GJ	ROI at midnight GJ	Cash out allocation GJ	End of Day ROI GJ	EDO I GJ
Welded Point A	0		50,000	50,000	-10,000		0	0	0	0
Other Welded Points	2,000		20,000	23,000	2,000		-1,000	1,000	0	2,400
Total	2,000	N/A	70,000	73,000	-8,000	5,000	-1,000	1,000	0	2,400

Cost of balancing gas	\$/GJ	\$ 10.00
Cost to balancing operator	\$	\$ 50,000
Incentives Pool Claim	\$	\$ 40,000
Incentives Pool Debit Price	\$/GJ	\$ 16.67
Daily Incentive Price	\$/GJ	\$ 164.68

Balancing Costs

Welded Party A	\$	\$ -
Other Welded Parties	\$	\$ 50,000

Summary

This example is based on the same incident as the Status Quo apart from the allocation of balancing costs. At the end of the day Welded Party A has neither a running or daily imbalance so does not incur any balancing costs even though it was Welded Point A's unplanned maintenance outage that caused the line pack to go outside tolerances. The other Welded Parties have a running imbalance at the end of the day of -1,000GJ, which is back-to-back cashed out. The remaining balance gas costs can't be recovered from Welded Parties running imbalance so is recovered from the Incentive Pool. The other Welded Parties have daily imbalance outside of their tolerance (tolerance = 20,000 * 3%) of 2,400GJ. \$40,000 of balancing cost is required to be recovered from the Incentive Pool. The Balancing Agent can use up to a maximum of the Daily Incentive Price but in this case the Incentive Pool Debit Price of \$16.67. As there is no transfer of title it is unclear in the proposed Change Request how the additional 4,000GJ of gas in the line pack will be handled but it would not be unexpected for the balancing agent to try and assign this to a future cash-out.

Appendix B: Without a package of changes the proposed Change Request creates perverse outcomes

Status quo

	Opening ROI	AEOI	SQ	MQ	ROI at midday	Balancing Gas purchase (sale)	ROI at Midnight	Cash out allocation	End of Day ROI	EDO I
	GJ	GJ	GJ	GJ	GJ	GJ	GJ	GJ	GJ	GJ
Welded Point A	0	6000	50,000	50,000	10,000		0	0	0	0
Other Welded Points	-2,000	6000	20,000	17,000	-2,000		1,000	0	1,000	0
Total	-2,000		70,000	67,000	8,000	-5,000	1,000	0	1,000	0

Cost of balancing gas	\$/GJ	\$ 0.30
Cost to balancing operator	\$	-\$ 1,500
Incentives Pool Claim	\$	\$ -
Incentives Pool Debit Price	\$/GJ	\$ -

Balancing Costs

Welded Party A	\$	\$ -
Other Welded Parties	\$	\$ -
Opportunity cost to other Welded Parties assuming purchase cost is \$8/GJ	\$	\$ -

Summary

A power station on the Vector Transmission system trips at 11am and is unable to take gas for several hours but by the end of day has taken to its quantity leaving the running and daily positions at Welded Point A at zero. The excess gas not taken by the power station causes the line pack to go outside tolerances and balancing gas to be sold. As all Welded Parties imbalances are within tolerances the balancing costs are socialised.

Back-to-back balancing with no ability to call a 15.2 event

	Opening ROI GJ	AEOI GJ	SQ GJ	MQ GJ	ROI at midday GJ	Balancing Gas purchase GJ	ROI at midnight GJ	Cash out allocation GJ	End of Day ROI GJ	EDOI GJ
Welded Point A	0		50,000	50,000	10,000		0	0	0	0
Other Welded Points	-2,000		20,000	17,000	-2,000		1,000	-1,000	0	N/A
Total	-2,000	N/A	70,000	67,000	8,000	-5,000	1,000	-1,000	0	0

Cost of balancing gas	\$/GJ	\$ 0.30
Cost to balancing operator	\$	-\$ 1,500
Incentives Pool Claim	\$	\$ -
Incentives Pool Debit Price	\$/GJ	\$ -

Balancing Costs

Welded Party A	\$	\$ -
Other Welded Parties	\$	-\$ 300
Opportunity cost to other shippers assuming purchase cost is \$8/GJ	\$	-\$ 7,700

Summary

The example is the same as Status Quo apart from the implementation of the proposed Change Request. The other Welded Parties sell 1,000GJ for \$300 due to their positive imbalance. As the daily imbalance mechanism in the Incentive Pool only relates to overtaking 4,000GJ of gas owned by other shippers has been sold to the Balancing Gas purchaser. It is unclear in the proposed Change Request how the additional 4,000GJ of gas will be replenished but it is presumed that the costs associated with this transaction will be socialised.

Back-to-back balancing with ability to call a 15.2 event

	Opening ROI GJ	AEOI GJ	SQ GJ	MQ GJ	ROI at midday GJ	Balancing Gas purchase GJ	ROI at midnight GJ	Cash out allocation GJ	End of Day ROI GJ	EDO GJ
Welded Point A	0		43,750	43,750	0		0	0	0	0
Other Welded Points	-2,000		20,000	17,000	-2,000		1,000	0	1,000	3,000
Total	-2,000	N/A	63,750	60,750	-2,000	0	1,000	0	1,000	3,000

Cost of balancing gas	\$/GJ	\$ -
Cost to balancing operator	\$	\$ -
Incentives Pool Claim	\$	\$ -
Incentives Pool Debit Price	\$/GJ	\$ -

Balancing Costs

Welded Party A	\$	\$ -
Other Welded Parties	\$	\$ -
Opportunity cost to other shippers assuming purchase cost is \$8/GJ	\$	\$ -

Summary

Again this is the same example but a package of changes is implemented including linked nominations (or virtual Welded Points) that allows the Power Station to call a 15.2 to deal with the trip. The Scheduled Quantity at Welded Point A is reduced along with the producer who was supplying the gas. This prevents the need for any sale of balancing gas, creating an effective and efficient outcome.