

17 December 2009 MPOC Change Request [Balancing]: Draft Recommendation

Submissions close 4 June 2010

Greymouth Gas New Zealand Limited (Greymouth Gas) is pleased to make a submission on the 17 December 2009 MPOC Change Request [Balancing]: Draft Recommendation (the paper), submitted by the Gas Industry Company Limited (GIC) to the industry for comment on 7 May 2010. We welcome the opportunity to submit.

The GIC must hear the market's voice because the message is loud and clear.

1) The GIC Must Reverse Support in Final Recommendation

While Maui Development Limited (MDL) is on the right track, fundamentally, tightening back to back balancing operations but embedding inflexible tools for users to manage exposure is wrong.

Greymouth Gas believes GIC support of the 17 December MPOC Change Request (the Change Request) [a reversal of the GIC's previous position¹] will continue to add costs to customers, many of whose New Zealand viability is under stress from issues like the potentially cumulative impact of GST increases, Emissions Trading Scheme and ACC on inflation, plus lingering effects of the recession.

It is disappointing that the GIC appears to be taking a TSO-sided economic purist's view of the Change Request while disregarding fairness, reality and the impact on customers which are the back-bone of NZ Inc.

The GIC must reverse its support in the final recommendation because:

- The GIC overall evaluation is significantly and materially flawed,
- Greymouth Gas calculates a -1.1 impact of the Change Request compared with the status quo using the GIC's own framework and weightings,
- There is no cost-benefit analysis and there are other process concerns,
- It will result in increased costs for consumers.

Greymouth Gas will analyse the content of the paper shortly, but in the interim we have some concerns about the Memorandum of Understanding between the GIC and MDL dated 5 October 2006 (MoU), how much balancing work-streams have cost to date, and process issues relating to the Change Request.

¹ "Considering the wide scope of the December Change Request, Gas Industry Co believes it may be difficult to approve the whole package unconditionally", from the Executive Summary of the 17 December 2009 MPOC Change Request Status Update paper issued to the industry in March 2010

2) The GIC Must Cancel Current MoU with MDL & Rewrite

Greymouth Gas considers that the most immediate and pragmatic benefit the GIC can make for the gas industry today is to cancel the current MoU with MDL and rewrite it.

The MoU was originally intended to be for smaller change requests, not re-writes of substantial sections of the MPOC. To this end, we urge the GIC to cancel the MoU as soon as possible due to concerns about the current agreement:

- Different themes and changes are within one change request parties should be contractually mandated to submit change requests on specific topics only,
- The submitter of an MPOC change request can submit a bunch of good changes, then one or two bad changes that are contrary to the Gas Act 1992, yet the GIC must recommend such a change request in aggregate for approval if there is an overall net benefit,
- Change requests should be smaller,
- The MoU is out of date,
- There is an all-or-nothing approval framework, which should be debated by industry before settling on a policy,
- There is no conceptualisation of what will happen if multiple counter change requests are on the table or signalled for being on the table at the same time.

Greymouth Gas considers that MDL and the GIC should, together with consultation with MPOC parties, urgently write a new MoU that addresses these serious concerns.

3) Excess Cost

Greymouth Gas notes that the recent balancing improvements over the last few years have all been driven by the industry and we question how much money has been spent to date on all non-industry driven balancing issues.

4) Change Request Process Issues

Greymouth Gas is concerned that the GIC has not followed the correct process with regard to section 2.4(a) of the MoU, noting that the GIC shall:

Prepare an analysis of the issues under consideration, **including** (unless GIC is satisfied that the issues are minor and will not adversely affect the interests of an industry participant in a substantial way) **a cost-benefit analysis**.

There is no doubt that the GIC considers balancing issues to be major, ergo a costbenefit analysis needs to be prepared which it has not been.

If the GIC is trying to say in section 9.1 of the paper that the overall evaluation of costs is a cost-benefit analysis, then the GIC's own precedent means this cannot be the case:

- Section 3.1 of the paper sets out the efficiency analysis framework for evaluating the Change Request.
- During the Transmission Pipeline Balancing work-stream process, specifically the July 2009 Transmission Pipeline Balancing Second Options Paper, the GIC set out the same efficiency analysis framework.
- In response to the latter, industry and, we understand, the Associate Minister of Energy, requested that the GIC re-comply with section 43N(1)(b)(i) of the Gas Act 1992, in which the GIC 'must assess [all reasonably practicable options for achieving the objective of the regulation] by considering the benefits and costs of each option'.
- The outcome of the latter was two versions of a financial cost-benefit analysis, prepared by NZIER.
- GIC and industry precedent therefore says that any cost-benefit analysis must focus on financial analysis (specifically NPV analysis), and any efficiency analysis framework (with or without weightings or numbers) does not constitute a cost-benefit analysis.
- The GIC has therefore not prepared a cost-benefit analysis of the Change Request and is in breach of section 2.4(a) of the MoU.

Further, there a number of other alleged process breaches by the GIC, including:

- Section 2.4(b) of the MoU; where the cost-benefit analysis will be made available to industry for comment,
- Section 2.5(c) of the MoU; where the GIC must take into account cost-benefit comments as part of the decision-making process
- Section 5.5 of the MoU referring to Section 1 of Attachment 1 of the MoU;
 where all proposed amendments must use the GIC's standard
 Recommendation Request form:
 - $\circ\quad$ there is no MDL assessment of the Change Request on Parties with ICAs,
 - o there is no assessment of costs and benefits
 - there is no complete assessment of how it complies with the Gas Act and Government Policy Statement on Gas Governance dated April 2008)
 - o there is no assessment of *how* it complies with the Commerce Act

These process breaches alone should be enough for the GIC to reverse its support of the Change Request. But separately, the content of the paper is also significantly and materially flawed.

5) GIC Overall Evaluation & Weightings are Significantly and Materially Flawed

Even using the economic approach that the GIC used to assess the Change Request in section 9 of the paper, there are some significant and material flaws in the GIC analysis that formed the basis of the GIC's support of the Change Request.

5.1 Productive Efficiency Score-Card Analysis of Balancing is Wrong

In Section 3.2 of the paper, the GIC has four considerations with regard to Productive Efficiency re balancing and Greymouth Gas comments on these with reference to the evaluation and score-card analysis in Sections 7 and 9 of the paper:

Encourage participation and promote competition on balancing gas supply

In general about 3 or 4 parties have bids/offers on the www.bgx.co.nz website (the BGX), which is the source of balancing gas supply if we ignore that 'free' OBG arrangements are disappearing and that the Change Request does not, in itself, set up an alternative market or source of balancing gas supply.

To encourage participation, and therefore promote competition, the balancing gas market must be opened up to parties on the Vector pipeline because at the moment the BGX is solely for Maui pipeline users. The Change Request does not open up the balancing gas market therefore the paper does not impact the status quo in this regard.

The Change Request also incorporates a 'pay now, dispute later' provision. Prima facie this would improve MDL's cash flow but would not in itself encourage participation because there would be no impact on balancing gas sellers' cash flow. The impact on the status quo is therefore neutral.

Overall impact: neutral = 0

 Ensure that balancing gas is purchased only when, and to the extent, necessary

Balancing gas purchases by MDL are made in accordance with MDL SOPs based on line pack thresholds. Greymouth Gas understands that the buy/sell trigger points contain an element of human judgement by the balancing operator. To this regard we generally consider that balancing gas is purchased only when and to the extent necessary.

So while the paper changes the balancing framework and potential liabilities, it has little operational impact on improving productive efficiency on the purchase of gas by the balancing operator.

Overall impact: neutral = 0

Allow for purchase from the cheapest source of available balancing gas

Similar to the participation and competition comment earlier, MDL currently purchases from the cheapest source of available balancing gas assuming that the only market is the BGX. The Change Request does not establish another market; therefore the paper has a neutral impact on the status quo.

Overall impact: neutral = 0

Maximise the use of inherent Line Pack flexibility, subject to TSO thresholds

The logical interpretation of this is that those who use line pack have maximum use of its flexibility; or, in other words, that users are encouraged to self-balance within line pack thresholds.

The key issue at play here is who pays to keep line pack at optimum operating (or perhaps even contracted) levels if line pack is <u>within</u> the balancing-gas buy/sell thresholds.

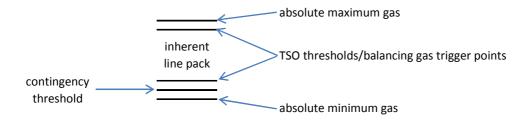
MDL appears to want line pack to be steady at optimum operating levels, hence why ROI tolerances and AEOI has been signalled for removal in the Change Request. It appears that MDL is trying to significantly reduce their own commercial need to buy/sell UFG gas, thus reducing their risks while simultaneously imposing costs on others all under the guise of 'improving' the balancing framework.

However, removing AEOI and tolerances will minimise line pack flexibility because the users (Shippers and Welded Parties) will be over-investing resources to keep line pack constant. Keeping line pack constant is not realistic because demand/supply will never exactly equal nominations:

- Look at any line pack graph: line pack moves up and down
- On the receipt side, weather can impact gas production by at least 5% at any time of the day
- On the delivery side, customers never use exactly what they forecast, and this ranges anything from 0% to 200% although in general 80% to 120%, these are natural swings of delivering gas to customers
- Shippers and Welded Parties are always correcting and managing running imbalance positions back towards zero

The fundamental tenet is that Shippers and Welded Parties should be able to manage their running imbalance, with some flexibility to take account of their customers' normal operating un-controllable swings. This reflects the theory of maximising the use of line pack flexibility, subject to TSO thresholds.

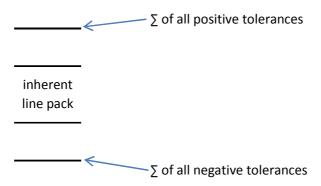
Refer to the following simplified diagram of a gas pipeline:



The inherent line pack above is a relatively small amount of total gas in the whole pipeline. With reference to this line pack, the aim of productive efficiency, as per section 3.2 of the paper, is to maximise the use of this.

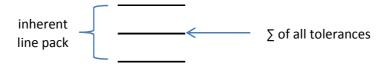
We know that Shippers and Welded Parties are the users of the line pack vis-a-vis management of their running imbalance. Vector Transmission is also a user, not with regard to its Welded Points [as the pass through Welded Point running imbalance is largely the sum of Shipper running imbalances], but vis-a-vis their Vector Running Imbalance.

As Greymouth Gas understands it, here is the status quo with regard to use of inherent line pack:



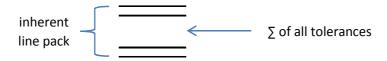
The difference between the tolerances is the use of line pack flexibility, and there is a lot of flexibility. All Welded Parties could be operating within their ROI tolerances yet line pack can be outside the trigger points for buying and selling balancing gas, egro MDL cannot wholly allocate costs to causers and some costs are socialised. The status quo is not as productively efficient as it could be because use of inherent line pack is greater than physical constraints, resulting in additional costs here and there; however, it does maximise use of inherent line pack flexibility (albeit too much).

The Change Request looks like this, with regard to use of inherent line pack:



The key point is that use of line pack flexibility will reduce, but it will be absolutely minimised, which is not productively efficient either. In fact, the Change Request contains <u>no element</u> of maximising the use of inherent line pack at all, so from a production efficiency perspective it is significantly worse than at present.

Greymouth Gas maintains that the simple solution is obvious:



I.e. reduce the current level of tolerances so that the sum of all tolerances is within the line pack limits so users can maximise the use of inherent line pack flexibility.

In the meantime, reducing *all* line pack flexibility is worse than the status quo because use of line pack flexibility is not maximised as per the goal and as it is at the moment, but it is eliminated.

Overall impact: negative = -5

There is a fifth factor at play here too...

Balancing arrangements should result in gas being supplied at least cost

The Change Request is positive in that back-to-back cash-outs should better target costs to causers thus gas should be supplied at least cost. This framework is not at question. What is at question is the operational flexibility on users to work within this framework (I.e. the tools and penalties). Nevertheless, a back-to-back cash-out model should improve productive efficiency on the allocation-side and the GIC's comments in section 9.1 of the paper on this are relevant.

Greymouth Gas considers this impact to be moderate relative to the status quo because the status quo arrangements reflect some degree of adequate cost recovery and some degree of least cost supply. Further, this issue isn't really about least cost supply but allocation of costs to causers, which isn't really a productive efficiency argument.

Overall impact: positive = +3

In summary though, what the GIC is missing in its score-card analysis of productive efficiency is an assessment against one of its four key criteria, use of inherent line pack flexibility.

If this is factored in, then the sum of all the overall impacts results in a marginal benefit of the Change Request of -2, not +3 as the GIC states.

5.2 Allocative Efficiency Score-Card Analysis of Balancing is Wrong

In Section 3.2 of the paper, the GIC has five considerations with regard to Allocative Efficiency re balancing and Greymouth Gas comments on these with reference to the evaluation and score-card analysis in Sections 7 and 9 of the paper:

• For users, the marginal price of the residual balancing service equals the marginal cost to the provider of that service

The Change Request would result in an improvement to the status quo as back-to-back cash-outs would seek to pass on the actual costs, not an historical cost that may not reflect cash-out costs (due to the ILON process).

However, the paper perhaps puts too much weight on this because the status quo is changing with MDL seeking to base current cash-out costs on bid and offer prices in the market rather than historical cash-out prices. To this regard the impact of the Change Request compared to the status quo might reduce by 1.

Overall impact: positive = +2

• For the Balancing Operator, the marginal price of balancing gas equals the marginal value of that gas to the supplier

The Change Request should be neutral compared to the status quo as the price will reflect value in a market, and the market doesn't change.

Overall impact: neutral = 0

• There is a common price for all equivalent balancing gas

The Change Request is neutral compared to the status quo because the BGX is not opened up to Vector shippers.

Overall impact: neutral = 0

• The marginal price for the centralised residual balancing service equals the price for the balancing gas

No comment.

Overall impact: negative = -1

• Users have the choice of either self-balancing or using the residual balancing services provided by the Balancing Operator

Users have the same choice under the Change Request and the Status Quo.

Overall impact: neutral = 0

There is a sixth factor at play here too...

• Balancing arrangements should be allocatively efficient if they provide the 'right' amount of service to the right users.

Again, the GIC has ignored the proactive arguments around encouraging users to self-balance themselves in normal operating conditions.

In other words, complete removal of tolerances is not allocatively efficient because there is no scope for users to manage their running imbalance under normal operating conditions. Status quo is also not allocatively efficient as there is too much tolerance for users, but at least there is some tolerance.

Having no service (tolerances) available to the right users makes the Change Request worse than the status quo from an operating perspective.

Overall impact: negative = -1

In summary, what the GIC is missing in its score-card analysis of allocative efficiency is an assessment against how the real world users of the framework will be impacted.

If this is factored in, then the sum of all the overall impacts results in a marginal benefit of the Change Request of 0, not +3 as the GIC states.

Greymouth Gas has no comments on security or user risks.

5.3 Cost Score-Card Analysis of Balancing is Wrong

Greymouth Gas has no comments with regard to Agreement or Implementation, but the GIC's comment in section 9 of the paper that there will be no material change on operating overhead costs only considers half of the picture, i.e. from the balancing operator's perspective. What's missing is an understanding that if users have to operate under an inflexible framework, then users (Welded Parties and Shippers) will have to invest more resources into overheads to work within that framework. Compared to the status quo, the following table sets out the theory of what will happen:

Status Quo	Change Request	Impact	
+/- 3TJ tolerance	No tolerance	No scope to manage normal customer fluctuations, increased user overheads to manage inflexible regime, increased potential for balancing costs to flow to end-use customers	
150% peaking	125% peaking	Increased user overheads to manage inflexible regime	
3TJ for excess daily imbalance	3% of SQ for excess daily imbalance	Increased user overheads to manage inflexible regime, increased potential for balancing costs to flow to end-use customers	
ILON process	Back-to-back balancing	Instead of managing running imbalances with a day's lag, all users will need to actively monitor 24hr line pack and hourly running imbalances (if possible) – this will increase user overheads	

While there will be limited operating cost changes for the Balancing Operator, from a user perspective, the cost impact is most definitively negative given the tools and penalties are so inflexible.

Overall impact: negative = -2

5.4 Governance Score-Card Analysis of Balancing is Wrong

In section 9 of the paper, the GIC summarises its position then provides a weighting. Greymouth Gas discusses each of these in turn:

• Transparency and non-discrimination

While the Change Request formalises a number of things like consultation on SOPs, audit, information disclosure etc, the GIC must realise that MDL generally cooperates with users at the moment. So from a transparency perspective nothing much will change compared with the status quo, other than the Balancing Operator will be contractually obliged to perform certain tasks rather than doing them anyway as part of good business practice. Accordingly, the +3 score is too ambitious.

Overall impact: positive = +1

Adaptability

Transitional provisions have never been excluded from Change Requests; they just haven't explicitly been included. Transitional provisions add little value. However, the commitment to consult on SOPs is positive, although like the previous paragraph, MDL does do this at present.

Therefore a neutral impact would be more appropriate rather than the +1 decided by the GIC if it weren't for one thing. The Change Request removes the AEOI concept and tolerance concept from the MPOC making the ability to adapt the MPOC and reestablish these concepts a lot more difficult. To this regard the Change Request has a negative impact compared to the status quo because it seeks to embed inflexibility by removing concepts rather than leaving the concepts in but reducing the values.

Overall impact: negative = -1

Enforcement

Pay now, dispute later "may slightly [improve things]"; this hardly constitutes a +1, if anything it should be neutral because in business if someone's not going to pay, they're not going to pay and a dispute will happen anyway.

Overall impact: neutral = 0

Balance

No comment

Overall impact: negative = -1

Stability

In section 9.1 of the paper the GIC makes one point in favour of the Change Request and another not in favour. These should cancel out and make any impact on stability neutral compared to the status quo.

In fact a negative impact is actually supported by the previous rounds of industry submissions on this work-stream, the majority of which did not support the Change Request in its entirety.

Therefore the chances of other users submitting counter change requests is high, meaning the stability that the Change Request would create would be eroded by unhappy users wanting further change.

Overall impact: negative = -1

5.5 No Score-Card Analysis of Non-Balancing Issues

The Overall Evaluation in section 9.2 of the paper does not have any score-card for the evaluation of non-balancing aspects of the Change Request, which is wrong.

Not having such an analysis, and not analysing the weightings between balancing and non-balancing changes within the Change Request, does not sit very well with the GIC's comment in section 9.3 of the paper:

Regarding the non-balancing aspects of the change request...makes the overall analysis difficult to perform and present coherently.

So because it was difficult to perform in entirety, only half of it was done in the score-card approach? Process issues aside, the GIC does note that non-balancing

changes are in general non-contentious, but this should not absolve the GIC from analysing non-balancing issues to the same degree as balancing issues especially considering a further comment in section 9.3 of the paper:

[The GIC is] concerned the liability changes may reduce the incentives for MDL to work with Vector to ensure their regimes align.

Greymouth Gas is concerned that this thinking alone should have necessitated a score-card analysis for non-balancing issues and an assessment of the balancing/non-balancing % split in the Change Request.

Therefore because of GIC concerns and those of shippers in prior submissions, a negative impact on the status quo should be assumed until such time as a complete and proper assessment is made.

Overall impact: negative = -1

5.6 Overall Evaluation

In addition to the GIC not considering users in its analysis, there has been no consideration of the weightings applicable to each section. Here's how we see this analysis should have played out:

Item	GIC Rating	Greymouth Gas Rating	Weighting
Productive Efficiency	+3	-2	30%
Allocative Efficiency	+3	0	10%
Security	0	0	5%
User Risks	-1	-1	5%
Cost Agreement	-1	-1	5%
Cost	-2	-2	5%
Implementation			
Operating Cost	0	-2	5%
Governance	+3	+1	5%
Transparency			
Governance	+1	-1	5%
Adaptability			
Governance	+1	0	5%
Enforcement			
Governance	-1	-1	5%
Balance			
Governance Stability	+2	-1	5%
Non-balancing issues	n/a	-1	10%

GIC weighted rating = +1.3 Greymouth Gas weighted rating = -1.1

Why is the GIC's analysis so fundamentally different to ours?

Greymouth Gas suggests that the reason is because the paper focuses too much on the purchase/balancing gas side [TSO], rather than on the real-world impact on Shippers, Welded Parties, and ultimately end-use customers and NZ Inc.

6) The GIC Must Reverse Support in Final Recommendation

In conclusion, Greymouth Gas finds it difficult to understand how the GIC can support the Change Request given the serious holes in the process, lack of a cost-benefit analysis, previously signalled non-support, lack of weightings on the efficiency analysis, skewed and inaccurate efficiency analysis, material flaws in the efficiency analysis and serious issues with the MoU.

MDL is on the right track, but this Change Request does not stack up. Accordingly, Greymouth Gas submits that the GIC should not support the Change Request for approval in their final recommendation to MDL.

This work-stream should never have come this far.