Statement of Proposal
Transmission Pipeline Balancing

Submission from
Maui Development Limited

2 November 2009

1. Introduction and background

MDL opposes rules of the kind described in the Statement of Proposal (Proposed Rules) being recommended or made because:

- MDL doubts that the Proposed Rules can lawfully be recommended or made; and
- MDL believes the Proposed Rules should not be recommended or made; and
- MDL believes that, if made, the Proposed Rules will be both costly and difficult to implement, if they can be implemented at all.

MDL expands on each of these reasons below.

2. MDL doubts that the Proposed Rules can lawfully be made

MDL doubts that the Proposed Rules can lawfully be made for at least the reasons set out below.

Process failure

Gas Industry Company Limited (GIC) has not included in the Statement of Proposal all the information and material required by s 43N(2)(c) of the Gas Act. In particular:

No cost/benefit analysis

There is no cost/benefit analysis as required by s 43N(1)(b)(i). Rather, GIC concludes, without analysis in the Statement of Proposal, that the establishment costs of the Proposed Rules would be covered by improvement in the order of 5%. This conclusion relies upon an options paper now nearly a year out of date[1] which did not examine the participative regulation option. GIC also assumes, again without analysis in the Statement of Proposal, that the ongoing costs will be similar to those which currently apply[2]. MDL considers the ongoing costs implied by the Proposed Rules will be higher than current costs.

GIC appears not to have identified, considered or taken into account the initial and continuing costs associated with:

[1] Section 5.1 of the Statement of Proposal.
[2] Section 7.6 of the Statement of Proposal.

- the governance, management or control of a jointly-appointed Balancing Agent;
- the joint governance and monitoring of the joint balancing plan;
- agreement of subsequent balancing plans and of amendments to them;
- in respect of MDL, securing the necessary authority to perform its role and obligations under the Proposed Rules;
- overriding and confiscating private property rights – see below; and
- the independent management of line pack by the Balancing Agent – which will be borne by the TSOs but have not been identified or valued.

Assessment should have been of transmission pipelines separately in this case/there is another reasonably practicable option

GIC has evaluated the options with respect to the whole transmission system on a common "one-size-fits-all" basis rather than evaluating those options with respect to particular transmission pipelines. GIC has done so without explaining or justifying its reasons for doing so. As a result:

- GIC has attributed perceived market failures to all transmission pipelines (and to the whole transmission system) when, in fact, those market failures only apply in respect of some of the transmission pipelines;
- GIC has failed to recognise that options may be reasonably practicable for some pipelines but not for others;
- there is a risk that regulation will be imposed unnecessarily and wastefully on one transmission pipeline in an attempt to deal with perceived problems on others; and
- consequently, there is a risk the private property rights of a TSO will be overridden or confiscation without cause.

GIC notes in the Statement of Proposal that MDL has made real progress in improving MPOC balancing arrangements. MDL has also advised that it is in the process of preparing a further Change Request under MPOC which, if given effect, would make further improvements to MPOC balancing arrangements. Those improvements include in respect of governance,

allocation of balancing costs and potentially wider participation in the balancing market[3].

Unlike either the process laid out in the Proposed Rules or the process described in the ICD Terms of Reference, neither consensus nor unanimity is required in order for a Change Request successfully to be processed, approved and to become part of MPOC. This is the adaptability which is a major benefit of the contracts based option.

In MDL's view it is plain that, in respect of the Maui Pipeline and MPOC, a contracts based option is a reasonably practicable option. This has not been taken into account by GIC. Rather GIC recommends a "one-size-fits-all" regulatory approach in respect of the whole transmission system regardless of whether that is necessary. MDL notes that this creates perverse incentives going forward, and may hinder future evolutionary change.

Fundamental assessment error

GIC has failed to properly identify and describe the key features of the participative regulation option to such an extent that it is not possible to analyse that option as against, for example, the contracts based option. The failure is such as to make the overall combined results shown in Table 5 of the Statement of Proposal and the sensitivity analysis shown on Table 6 of the Statement of Proposal of little value.

GIC has assessed the participative regulation option as having many of the benefits of the contracts based option, such as the minimisation of the costs of establishment, implementation and operation, and of adaptability by virtue of the proposed arrangements for the joint appointment of a Balancing Agent and for the preparation of a balancing plan.

However the GIC has not assessed the likelihood that those arrangements can or will actually be made. In MDL's view that is very unlikely because:

- there are weak commercial incentives to reach an agreement given the consequent risks and lack of return or other benefit;
- the Proposed Rules appear to provide gaming and free ride opportunities;
- regulation may be the preferred option of one or more of the negotiating parties anyway: the requirement for unanimity rewards hold out or rent seeking; and
- in MDL's case, MDL does not have the right, power or authority to enter into such arrangements because (as a mere agent) its rights,

[3] This Change Request has been in preparation for some while and many of the proposed changes were signaled in MDL's letter to GIC of 1 September 2009.

powers and authorities relate only to the business, assets and liabilities of the Maui Joint Venture.

The Proposed Rules will more likely than not result in the GIC itself appointing the Balancing Agent and preparing the balancing plan by virtue of the deadlock breaking provisions in the Proposed Rules.

The participative regulation option should have been analysed as a variant of prescriptive regulation option A having regard, on the one hand, to the prospect (slim in MDL's view) that the TSOs will jointly appoint a Balancing Agent and prepare a balancing plan and, on the other, to the likelihood (high in MDL's view) that establishment costs will be duplicated by both the TSOs' and the GIC's processes, and that the implementation period will be longer and more delayed than either of the prescriptive options.

In sum, by failing to assess the likelihood that the participative regulation option will actually result in agreement by TSOs as to the appointment of a Balancing Agent and the making of a balancing plan GIC has both misdescribed the participative option and overvalued the benefits associated with it.

Overriding/confiscation of private property rights

The Proposed Rules have the effect of overriding or confiscating private property rights without consent or compensation. This is because the Proposed Rules would:

- impinge upon, and partly remove, a TSO's right to manage and operate its transmission pipeline by removing its right to act as Balancing Agent, or to appoint a Balancing Agent, in respect of its own transmission pipeline; and

- impose liability upon a TSO in respect of events or circumstances which do, or may, occur on or affect another TSO's transmission pipeline; and

- do so without explicitly making a Balancing Agent appointed under the Proposed Rules liable to the TSO for the consequences and effects of its actions[4] or requiring prudential support for such liabilities.

The confiscation of private property rights is a regulatory issue of the utmost importance and which ordinarily merits and receives close attention. The costs and losses associated with overriding private property rights are well and generally acknowledged yet have not been considered by GIC.

[4] In so far as they may, for example, affect transmission services (and thus revenues) or result in physical damage to the transmission pipeline.

MDL lacks authority

As is well known public information, MDL is merely the agent of the Maui Joint Venture and has no rights, powers or authorities beyond the business, assets and liabilities of that venture.

MDL does not have the right, power or authority to perform its functions and obligations under the Proposed Rules.

Rules cannot be used

GIC proposes using rules rather than regulations to implement the Proposed Rules. This is noted at s 3.4 of the Statement of Proposal. Unfortunately there is no substantial discussion of the basis upon which the Minister would make a decision under s 43Q(2), and there is no record of the input received from relevant Government agencies, though that consultation is referred to in this section.

In MDL's view, given that:

- private property rights would be overridden or confiscated by the Proposed Rules;
- new and onerous obligations would be imposed on TSOs in respect of each other's transmission pipelines;
- in MDL's case, either it will have to be given the right, power and authority to perform its role and obligations under the Proposed Rules (despite the Maui Joint Venture arrangements) or its principals will have to be compelled to provide it with such rights, powers and authorities; and
- GIC is given default rights in respect both of the appointment of a Balancing Agent and the making of a balancing plan.

If made, the Proposed Rules would have material effects on the rights and interests of industry participants (and, in particular, TSOs) and would confer powerful and new rights on GIC. This must be done by, or by virtue of, statute not by rules. MDL notes that similar default rights are conferred upon GIC by regulation in respect of critical contingencies.

In MDL's view some parts of the Proposed Rules might properly be included in rules but other parts must be included in regulations, assuming the relevant regulatory power has been conferred by statute.

3. MDL believes that the Proposed Rules should not be made

MDL believes that the Proposed Rules should not be made for reasons which include those following:

The problem does not justify the recommended solution

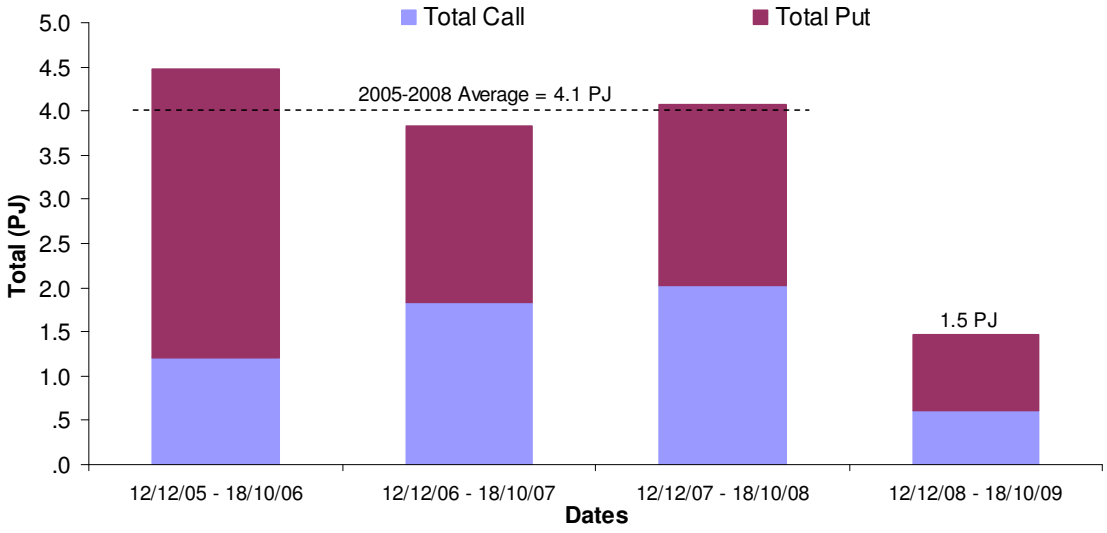
The Proposed Rules deal only with residual balancing.

In MDL's view:

- it is inefficient and operationally risky to separate residual balancing from the overall operational management of line pack (which includes the provision of incentives for primary balancing);
- residual balancing as envisaged by the Proposed Rules is unlikely to be a material part of that overall operational management function;
- residual balancing is a minor aspect of the wider balancing issues which are already well identified and, in MDL's view, more important;
- a contracts based approach on the Maui Pipeline and MPOC is both feasible and reasonably practicable.

Further to the points above, there is clear evidence that balancing arrangements have improved substantially in the last year. Figure 1 below illustrates this point. In the last year alone the volume of balancing gas required has reduced by nearly 60 per cent. This significant improvement should have been considered more fully in light of the fact that the improvement was driven primarily through contractual means. It is expected that the introduction of back-to-back balancing cost allocation will reduce requirements for balancing gas to even lower levels.

Figure 1: Balancing gas use 2005-2009



The average number of days where balancing actions have been taken in 2009 to date is 96 (from 302 days), or once every four days over a year.

Of the days where balancing actions have been required in 2009, some 99 per cent of all imbalances that have resulted in the issuing of cashouts occurred at interconnection points with the Vector transmission pipelines. The cashouts were the result of the TSO of those pipelines using imbalances to meet its operational capacity requirements and of not taking any steps to balance its own pipeline.

It follows that, in MDL's view, the risks, costs and expenses involved in recommending, making and implementing the Proposed Rules cannot be justified by the perceived problem which they would be intended to address.

The Proposed Rules do not deal with major outstanding issues

Investment

A consequence of the overriding/confiscation of private property rights is the potential effect on investment and new investment in transmission pipelines and in the transmission system. Such investment is important in meeting a number of GPS objectives including, for example, continued downward pressure on the delivered price of gas and the need to meet the needs of consumers and users. Neither of these matters has been addressed or assessed by GIC.

More important issues not addressed

GIC has deliberately narrowed the issues which it intends be dealt with by the Proposed Rules but, by doing so, GIC has deferred consideration of, and movement on, a number of issues which, in MDL's view, are more important than residual balancing. These include:

- the provision of real time information at Welded Points on the Vector transmission pipelines;

- end-of-day or following-day allocation of gas deliveries on the Vector transmission pipelines; and

- the provision of balancing tools for shippers on the Vector transmission pipelines.

Thus, the Proposed Rules will not in fact deal with the balancing issues which have been identified by GIC, TSOs, Welded Parties and Shippers as major problems. This piecemeal approach to regulation necessarily imposes inefficient costs on industry participants.

The Proposed Rules likely to duplicate costs

The Proposed Rules will result in there being two parties with discrete roles in the management of line pack on each transmission pipeline. These parties are:

- the TSO, which will remain responsible for balancing around target line pack (within the upper and lower thresholds), and all other aspects of line pack management including curtailment, issuing operational flow orders, and the like (we refer to this as the *prime line pack management function*); and
- the Balancing Agent under the Proposed Rules with responsibility (despite the purpose statement) for residual balancing.

The Proposed Rules also provide for the Balancing Agent to advise the TSO when the Balancing Agent is unable to procure balancing gas for a required balancing action, presumably on the basis that the TSO will be obliged to take some step as a consequence.

MDL is strongly of the view that the prime line pack management function and residual balancing should not be separated. It is inconsistent with the ERGEG principles – which previously were adopted by GIC as applicable – for that to occur. Moreover these roles and functions cannot be performed alone: both the TSO and the Balancing Agent will need actively to monitor line pack on a 24/7 basis, to coordinate their work whenever that is necessary, and separately to be equipped so as to perform their respective roles and functions. Rather than reduce costs, this will duplicate costs.

The Proposed Rules likely to increase the number of balancing transactions

The Proposed Rules will also require more balancing transactions than would be the case under the *status quo* because the balancing actions undertaken by the Balancing Agent will bring line pack only to the relevant upper or

lower threshold, after which further balancing may be required to be performed by the TSO to bring actual line pack (less other users' imbalances) to the target line pack as required by the Proposed Rules. While such an action should be at the Balancing Agent's discretion, making this an absolute requirement will increase overall balancing costs. MDL's work has indicated that it is not always efficient or necessary for balancing actions to return line pack pressure to the target. The current Standard Operating Procedures as published on OATIS reflect that work but will be overridden by the Proposed Rules.

Coordination costs and risks

The need for the TSO (in performing its prime line pack management function), and the Balancing Agent to coordinate their activities will necessarily:

- create transaction costs, where otherwise there would be none;
- involve the risk of a lack of coordination, or imperfect coordination, with consequent additional balancing actions or other costs;
- in the worst case, involve risks to the security of supply.

GIC does not appear to have taken these costs and risks into account in the Statement of Proposal.

Lack of discretion will compound these costs and risks

The Balancing Agent does not have discretion either to buy balancing services in excess of those required for its residual balancing function or to pay costs over and above the relevant threshold prices. This lack of discretion is likely to compound problems of the kind referred to above and, in all likelihood, to add complexity late and without notice.

Competition in balancing markets

The TSO (in respect of its prime line pack management function) and the Balancing Agent will potentially be competing in the balancing market for balancing services. This is something which GIC has sought to avoid, presumably so as to deepen the pool of balancing services available to the Balancing Agent[5]. However, in MDL's view TSOs will inevitably have to participate in the balancing market in order to perform their prime line pack management functions.

Misstated purpose

[5] MDL does not particularly share GIC's concerns, noting that markets generally operate best when there is depth and liquidity on both sides of the bargain. Nonetheless GIC has made much of the point.

The purpose stated in s 3 of the Proposed Rules is misstated and will cause confusion. In particular:

- the purpose statement suggests that the Balancing Agent manages all imbalance in a particular transmission pipeline and in the transmission system as a whole when, as a matter of fact and necessity, the prime line pack management function falls to TSOs[6]. Given s 66 (Relationship with transmission system codes) of the Proposed Rules this will raise questions as to what issues can properly be dealt with in the transmission system codes as against those which are dealt with by the Proposed Rules. An example is whether and, if so, to what extent and by what means a TSO can recover the costs of performing the prime line pack management function;

- the purpose statement will thus result in the roles of the TSO and Balancing Agent being unclear and may result in them, and users, being unclear as to who, in particular circumstances, is required to perform particular functions; and

- despite the purpose statement the Proposed Rules do not result in an efficient unified balancing arrangement: the actual Proposed Rules and the purpose statement already diverge.

Free riding/gaming

In MDL's view the Proposed Rules create the opportunity for free riding and gaming among TSOs: in particular for Vector transmission pipelines to game and free ride as against the Maui Pipeline. The results of this include that:

- the costs of imbalance are not attributed to, and payable by, the causers of that imbalance;

- Shippers on the Maui Pipeline will subsidise the TSO of the Vector transmission pipelines;

- the TSO of the Vector transmission pipelines will not bear and pay the operational cost of delivering capacity to its shippers;

- the TSO of the Vector transmission pipelines will, despite the GPS, have no incentives to make its own arrangements for delivery of operational capacity on its own pipelines, or balance those pipelines itself, or invest in either of those things.

Despite the stated purpose of the Proposed Rules, the Proposed Rules in fact affect only residual balancing.

[6] Under s 6.1.1, 6.3 and the definitions of "balance" and "imbalance" in s 5.2.

Although users are required to use reasonable endeavours to balance, there is no remedy provided for in the Proposed Rules should they fail to do so - apart from bearing their share of the back-to-back costs of a residual balancing action. Those costs will not affect the full gigajoule quantity of the users' respective operational imbalances[7] because the denominator of the allocation fraction will be the aggregate operational imbalance rather than the quantity of the residual operational imbalance in respect of which the balancing action is taken.

At the same time, TSOs are required to ensure that an actual line pack matches the target line pack (less other users' imbalances). Many Vector transmission pipelines are incapable of balancing themselves, or of providing the operational capacity agreed with shippers, and can only do so by drawing on the Maui Pipeline. Notwithstanding this the TSO will not be required to pay, or pay full price, for respect of those drawings.

If, and to the extent, that MDL, in performing its prime line pack management function, incurs costs as a result of those drawings, those costs will (if recoverable at all) be recovered from MDL's Shippers, rather than from the TSO, and (if not recoverable) fall on MDL.

Balancing Agent serves two masters

The Proposed Rules require the TSOs jointly to appoint the Balancing Agent. Absent carefully negotiated arrangements this is contrary to common commercial practice, commonsense and the general law of agency[8]. An agent should not serve two masters; doing invites conflicts, impotence and dispute. Requiring the Balancing Agent to act "independently" only increases the confusion.

In order to make a joint appointment the TSOs will need to establish a joint governance and management process, including provisions for information, meetings, termination and dispute resolution. This adds establishment costs and transaction costs which do not appear to have been taken into account in the Statement of Proposal. In MDL's view it also involves a considerable risk of instability going forward.

ICD process

GIC has established the ICD process as described in s 5.4 of the Statement of Proposal. The ICD process will, presumably, be used by GIC to illustrate whether or not, as a matter of fact, the contracts based option is reasonably practicable. The ICD process is not appropriate for that purpose and, thus, involves a considerable risk of self-fulfillment and prior determination. By way of example:

[7] In the same direction as the aggregate operation imbalance.
[8] It is also beyond MDL's rights, power and authority – see above.

- the ICD process operates by consensus, defaulting to the GIC, whereas (at least under MPOC), Change Requests do not require consensus or unanimity and thus do not encourage hold out or rent-seeking;

- the objective specified by GIC in the Terms of Reference is effectively the same as the purpose statement in the Proposed Rules. In particular, and without explanation or justification, the ICD Terms of Reference relate to the transmission system rather than particular transmission pipelines. This reduces the space available for industry-promoted solutions to all the issues identified in respect of balancing;

- the ICD process has been allowed approximately nine weeks to cover topics considerably wider in scope and scale than those covered by the Proposed Rules whereas, under the Proposed Rules, the balancing plan process alone is allowed nearly six weeks, and the implementation of the Proposed Rules is not proposed to be completed before the third quarter of 2010; and

- the ICD process is occurring during the same period that these submissions are required on the Statement of Proposal and MDL is completing its proposed Change Request. This fails to recognise the resource and cost constraints to which industry participants are subject.

In MDL's view a failure to reach consensus in the ICD process cannot, and should not, be relevant in the consideration of the contracts based option. There is a risk that failure in that process is the more likely because of the limitations of the Terms of Reference and timeframe. It would be disappointing if such a process were artificially ended for such reasons.

4. MDL believes the Proposed Rules will be both costly and difficult to implement, if they can be implemented at all

Assumptions not justified

The Proposed Rules provide for TSOs jointly to appoint the Balancing Agent and to make a balancing plan. They assume that TSOs will, in principle at least, be both able and willing to do so, and to give partial management, control and operation of their respective transmission pipelines to the Balancing Agent. These assumptions are heroic.

MDL has no authority to give effect to the Proposed Rules

As has already been noted, MDL has no authority or power, and no right to incur obligations, other than in respect of the business, assets and liabilities of the Maui Joint Venture. This issue is not addressed by the Proposed Rules.

Shared liability

The Proposed Rules require each TSO effectively to be responsible for things that do, or may, happen on other transmission pipelines. MDL has noted above that there are weak commercial incentives and, possibly, divergent objectives which will mean TSOs are unlikely to assume the liability voluntarily. Similarly, the Proposed Rules require TSOs to cede a portion of their respective management operation and control of the pipeline to the Balancing Agent. Again, it is not clear why TSOs would voluntarily do that.

Risks and costs imposed on TSOs

The Balancing Agent, whether appointed by the TSOs jointly or by GIC, could potentially cause a TSO significant losses or costs, including:

- directly, if transmission services are not provided in accordance with the relevant transmission code or other contractual arrangements;
- directly, if physical damage is done to a transmission pipeline;
- directly, if TSOs' obligations are joint and several and another TSO declines, fails or is unable to pay an amount which is due; and
- indirectly, if the Balancing Agent is liable to a third party and entitled to claim on its indemnity.

These risks and costs are material (in a monetary sense) and not particularly remote (as to occurrence) yet the Proposed Rules leave them with TSOs despite the Balancing Agent being required to act independently. This

separates the risk from its management which is contrary to commercial practice and commonsense.

Neither do the Proposed Rules require that the Balancing Agent have the financial capacity to compensate damaged TSOs – presumably because that would increase, and externalise, the risk and cost associated with the recommended option. This risk and cost is, in fact, borne by the TSOs and should be counted in the assessment.

GIC not an appropriate body to make decisions on these issues

These are all difficult issues. With respect Maui doubts that GIC – which has no "skin in the game" – is the right body to determine what should be the position even in the case of a deadlock.

5. Conclusion

In MDL's view: there are doubts whether the Proposed Rules can lawfully be recommended or made; the Proposed Rules should not be recommended or made; and (if made) the Proposed Rules will be costly and difficult to implement, if they can be implemented at all.

If GIC remains of the view that regulation is required then, in MDL's view, that regulation should relate to the whole gas management system rather than what is, in MDL's respectful view, a relatively insignificant part of it.

Next steps

In MDL's view, GIC should:

- support the evolution of the MPOC balancing arrangements, including by giving careful consideration to MDL's upcoming Change Request;
- recognise that MPOC balancing arrangements can be improved without either unanimity or consensus by virtue of the amendment provisions already contained in MPOC: that is to say, in respect of the Maui Pipeline and MPOC that the contracts based option is reasonably practicable;
- focus its regulatory attention on the wider balancing issues which have been identified by MPOC and Shippers and which include:
  - provision of real time information on other transmission pipelines;
  - prompt allocation of gas deliveries on other transmission pipelines;
  - the availability of balancing tools, such as those provided for by MPOC, on other transmission pipelines.

- Work with industry to adjust the objective, work plan and timeframes for the ICD process to ensure that all balancing issues are be identified and addressed appropriately.

MDL is committed to evolving balancing arrangements in a timely, calculated manner, and is committed to working with GIC to achieve that end. MDL will present its Change Request as soon as possible to enable this process to continue.

6. Answers to specific questions

Q1: ***Do you agree with GIC's decision to pursue the ICD process? If not, why?***
MDL agrees with the ICD as a concept but is of the view that there are major defects in the current process. These include: the objective, the timeframe and context in which the process is occurring, the requirement for unanimity and the default to the GIC, the lack of working papers, and the uneven distribution of work load. To date MDL has presented to the ICD the steps and supporting detail about how MDL intends to improve balancing arrangements on its own pipeline and how the efficiencies of the Maui system can be extended through to the Vector system. It should be noted that MDL was developing and implementing these plans well before the ICD was established and has already invested substantial resources improving balancing arrangements. It would be disappointing and wasteful if the ICD process is not given a realistic opportunity to work. There are substantial risks associated with the overhaul of balancing arrangements and uncertainty about how pipeline users will change their behavior to respond to the new arrangements. Given that gas transmission pipelines are critical national infrastructure, a high level of care is warranted with respect to the development of new balancing arrangements. Adequate time should be provided to ensure that a quality balancing solution is identified and developed in a progressive and measured manner. This will require modeling of all operational code processes. Both MDL and Vector have experienced what is involved in the implementation of regulations through the development of Critical Contingency Management Plans. Based on that experience MDL are of the view that ICD process timing will not be sufficient to identify the most practicable balancing plans. MDL recommends that the GIC reserve judgment on when to abandon the ICD process, particularly because the same amount of detailed work would still be required to understand the impact on operational processes under a rule/regulated process under a regulated arrangement. Because the TSO's own the pipeline assets, they will ultimately be held responsible if new balancing arrangements fail. For this reason any decision that goes against the view of a TSO under the ICD process should be fully substantiated.

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

MDL does not agree with the GIC proposal. The primary reasons are provided below.

Balancing costs are already low

Under current conditions, the net cost of balancing gas used by the Maui Pipeline during 2009 will be approximately $8 million on a full cost basis[9], although actual net expenditure is estimated to be less than $2 million because a substantial portion of the balancing gas used during the year has been supplied at zero cost[10]. This compares with the value of gas transported over the same period which will be approximately $800 million over the same period. In percentage terms the cost of balancing in 2009 is estimated to be less than 0.3 per cent of the total value of gas transported. Furthermore as noted earlier, the number of days where balancing actions have been required in 2009 to date, corresponds on average to once in every four days.

Duplication of costs likely under GIC rules

Cost efficiency considerations arise from the organisation structures. Residual balancing may be required on only a few days each month. Nonetheless the Balancing Agent, who is required to act independently, will need to be able to take balancing actions on a 24/7 basis and to be resourced for that purpose.

We have not estimated a cost for the governance and staff requirements required for an independent residual Balancing Agent. However we believe that the effort involved will be substantially more than any saving gained from transferring the function. Cost estimates for a fully independent Balancing Agent of up to $2 million have been mentioned by the GIC, but we believe the actual cost will depend on the detailed organisation and governance structure chosen.

Overall costs of a regulated regime are likely to be underestimated

We are concerned about the GIC's suggestion that a 5% improvement in balancing costs would be sufficient to cover costs of up to $2 million involved in establishing the Balancing Agent function. Additionally, there are likely to be a large number of unknown costs that will not have been taken in to account. In our experience, balancing costs are principally governed by two factors:

- Staff costs. We have set out our reasons for believing that costs in this area will increase.
- Balancing gas prices. These are market driven and are not susceptible to being pushed up or down. Our estimate of balancing gas costs, assuming full costing for all gas purchased is $8 million as noted above. Even assuming a 5% reduction could be obtained in this figure, the reduction in cost would be only $400,000. Currently actual balancing gas costs are less than $2 million a year.

[9] Actual balancing gas expenditure and "full cost" expenditure data are available from the BGX at http://www.bgx.co.nz. This estimate assumes call balancing gas priced at zero is worth $12/GJ.

[10] It should be noted that ~99% of these costs can be directly associated with imbalances at the interconnection points between the Maui Pipeline and the Vector transmission pipelines as measured by the extent of cash outs being necessary on those points relative to total cashouts.

No cost/benefits analysis
The Statement of Proposal does not contain a cost benefit case beyond the assertion that a 5% saving in balancing gas costs would be sufficient to cover costs of setting up a Balancing Agent.

MDL believes that the cost of setting up and running a residual Balancing Agent under the proposed Rules will be greater than the cost of the current arrangements. It does not believe that the balancing cost reductions envisaged by the GIC will actually materialise and notes furthermore that past regulatory interventions have ended up costing significantly more than originally estimated.

MDL does not believe a cost/benefit case for the proposed regulation has been made.

Benefits of improvements to existing balancing arrangements are already apparent
As highlighted in Figure 1, the requirement for balancing gas has dropped substantially since the removal of the Legacy Gas provisions in December 2008. This is a result of improved behavior by pipeline users resulting from the ability of MDL to pass on balancing costs to them but also is due to the measures taken by MDL to reduce balancing gas use. In 2009 balancing gas usage was approximately 60 per cent below the average level of balancing gas used annually for the same periods from 2005 to 2008.

GIC rationale for regulation
In its last submission on the Second Options Paper[11], MDL put forward a work programme designed to meet concerns expressed by the GIC. This programme was commented on by the GIC in Appendix A of the Analysis of Submissions Paper[12]. The GIC felt that the work programme proposed was deficient in the following areas:

- It did not achieve a unified balancing regime.
- Increased transparency was needed through:
  - Consulting on SOP's.
  - Discussing how tolerances and thresholds were set.
- Increased Balancing Agent transparency was needed through:
  - Disclosing the Balancing Agent's contract.
  - Regular reporting of performance.
  - Audits.

These factors were referred to again in the Statement of Proposal with the addition of further points:

- Barriers to operating in the balancing market should be minimised.
- The balancing market should be as open as possible.

The GIC's conclusion was that it should pursue a two-fold approach taking up the participative regulation option on one hand while exploring the ICD process on the other, with the objective of making a recommendation to the Minister by the end of the year.

[11] Transmission Pipeline Balancing Second Options Paper, GIC July 2009
[12] Transmission Pipeline Balancing Second Options Paper – Analysis of Submissions GIC October 2009.

MDL's does not believe that these reservations constitute a sufficient reason to proceed with regulation. In particular:

- The definition of a unified balancing regime is unclear and fraught with operational and contractual difficulties. It is likely that a unified regime confined to a residual balancing function will create more problems than it will solve. These points are discussed in more detail below.
- Consulting on SOPs is an operational matter that can easily be introduced without regulation. SOPs have been changed in the past to reflect the changes in the sources and supply of balancing gas. The most recent changes, introduced this month, have the objective of increasing the amount of inherent pipeline flexibility available to users. They were posted in draft more than one month before their proposed introduction and comments invited from pipeline users. None have been received.
- Revised balancing thresholds are set in the balancing SOPs. As noted above these were open for comment before adoption.
- Proposals to adjust tolerances are currently being discussed with the industry as part of the ICD process.
- The Balancing Agent is currently Transact Management Limited, the Commercial Operator of the Maui Pipeline acting as an agent of MDL at arm's length. The instructions on how balancing should be carried out are included in the SOPs referred to above. These are published. Full reports on any pipeline incidents are also published. Reports on the Balancing Agent's actions are published on the BGX. These now include the timing of each action, the amount of balancing gas purchased, and the cost, (or income resulting from), each balancing action.
- Audit provisions are already in force for the Incentives Pool. MDL intends to provide similar provisions for the work of the Balancing Agent on the introduction of back-to-back balancing.
- The balancing market is closed to parties outside the Maui Pipeline for the time being. However the introduction of back-to-back balancing, which is under action by MDL will significantly reduce the risks of offering access to the market to parties beyond the Maui Pipeline. Other factors outside the scope of the proposed balancing rules, such as the provisions of ICA agreements need to be resolved. Discussions to achieve this are in progress as part of the ICD process.

Efficiency gains associated with the "Unified" balancing concept likely to be minimal

The unified balancing concept appears to be based on the assumption that both transmission pipelines can only be effectively balanced if there is a single Balancing Agent responsible for residual balancing on both pipelines and there is an agreed balancing plan that encompasses both transmission systems. MDL notes that purchasing of balancing gas and the arrangements for its use have been handled by a single entity, MDL, for some years. While changes to the cost allocation system are in the process of being made, a two-tier system, like that already in place, is likely to be the result.

There may be advantages to be gained by coordinating line pack management between the Maui Pipeline and parts of the Vector system that may be able to make

line pack available for balancing purposes. Our understanding at present is that this prospect may be limited to line pack on the Vector South line and Bay of Plenty system. In any case there is no need for a comprehensive set of rules like those proposed to bring about coordination in this area.

MDL's ability to accept additional balancing responsibilities
It has been suggested that MDL might be able to accept some additional legal responsibility for balancing pipelines beyond the Maui Pipeline. This proposition creates difficulties as MDL acts exclusively for the Maui Joint Venture. Briefly:

- MDL is the operator of the Maui pipeline for the Maui Joint Venture and the Maui Mining Companies.
- MDL acts exclusively for that Joint Venture.
- MDL, in turn, has appointed a Balancing Agent to manage the line pack in the Maui pipeline.
- MDL has no mandate/authority from the Maui Mining Companies to manage line pack in other systems.

MDL is therefore not in a position to fulfil the role of any unified Balancing Agent for the Maui and Vector pipelines.

In summary, given the progress on the work already underway in the industry, MDL does not feel that a strong-enough case demonstrating the need for the proposed rules/regulation has been made. From an operational perspective "all at once" change through rules/regulation of a complex technical area such as balancing is reckless – it is better to take controlled steps over a longer timeframe so that efficacy of arrangements can be determined.

Q3: ***Do you agree that the draft rules adequately address the balancing issues raised throughout this review? If not, why?***

MDL is of the view that the draft regulations do not adequately address the issues associated with residual pipeline imbalance.

MDL agrees with that the primary obligation to manage imbalance positions should be on users of the pipeline. However, MDL does not agree that the draft regulations adequately address issues with respect to residual pipeline imbalance on that basis. The main area of concern is that the draft regulations appear to contemplate the continued existence of separate operating regimes yet seek to impose an obligation on TSOs to ensure that actual line pack matches target line pack when adjusted for total running operational imbalance.

The ability of users (including TSOs) to manage their imbalance positions is dependent on information and the tools that are made available to users by the TSO under the pipeline operating regime. A lack of consistency between TSO operating regimes in relation to the availability of information and the ability to self manage positions during the day is likely to lead to uncertainty in relation to the Balancing Agent's role in managing residual imbalances from one pipeline to the other.

For example, it is not clear from the "imbalance" algorithm provided for in draft rule 5.2 (as it relates to the calculation of a TSO's imbalance), whether the obligation to

manage line pack to target in one pipeline zone could have the effect of causing an imbalance in another pipeline zone. The lack of clarity in this regard could, in turn, expose the TSO to uncertainty in relation to the allocation of balancing gas costs.

On the face of it, obligations to manage to target line pack appear to create an atmosphere of competition between the TSOs rather than coordination. This is in part a consequence of having three parties, (the Balancing Agent and the two TSO's), responsible for maintaining line pack according to different objectives. Currently the vast majority of balancing action is taken on the Maui Pipeline in order to manage fluctuations in demand on Vector's pipelines.

Insufficient time has meant that MDL has not been able to assess the full range of possible impacts of the draft rules and for this reason MDL has limited its focus to three key issues which are described below.

Curtailment and control

The Rules proposed in the Statement of Proposal are based on the concept of a Balancing Agent controlling line pack through the residual balancing mechanism only. In MDL's view this is unrealistic, potentially unsafe and may lead to security of supply issues which would not otherwise arise. The TSO's are required to agree on a balancing plan, (or have one imposed), which will cover all other aspects including curtailment and compressor operation. This obligation will necessarily include having staff available to carry out these functions.

Curtailment decisions are often difficult judgement calls which involve the risk or liability. However, like the use of balancing gas, curtailment is one of the tools that is used to keep the pipeline within its operational range. Generally the use of balancing gas is preferred[13] but there are occasions when curtailment or a combination of the use of curtailment and balancing gas is required. Separating the steps in the operational range is unwise.

According to the MPOC provisions[14], gas nominations may be curtailed:

- To or from any Welded Point for any period which in MDL's opinion is necessary:
    - to prevent Non-Specification Gas from entering, or being taken from, the Maui Pipeline; or
    - where Maintenance (other than Scheduled Maintenance) on the Maui Pipeline is required; or
    - where a Force Majeure Event occurs; or
    - where a Contingency[15] Event occurs; or
    - where that Welded Party has an Excess Daily Imbalance or exceeds its Peaking Limit at a Welded Point and MDL considers that delivery of Gas to that Welded Party may impair MDL's ability to deliver Gas to any other customer of MDL including the Buyer,
- From any Welded Point for any period which in the Welded Party's opinion is necessary:

[13] See the Maui Pipeline Standard Operating Procedures that set out when balancing gas may be used and when curtailment is required.
[14] See MPOC Section 15.
[15] Note that a Contingency Event can include high or low line pack events or unavailability of pipeline equipment, such as compressors.

- to prevent Non-Specification Gas from entering, or being taken from, its Pipeline;
- where Maintenance (other than Scheduled Maintenance) is required;
- where a Force Majeure Event occurs;
- where a Contingency Event occurs, or, in relation to that Welded Party's Pipeline, where a Pipeline Contingency Event occurs,

- Where the pipeline capacity has been exceeded.

Curtailments may occur if efforts to balance the pipeline by using balancing gas fail. This may occur because supplies of balancing gas have been exhausted or balancing gas cannot be supplied fast enough to keep the pipeline within operational limits. In the case of the loss of supply from a receipt Welded Point curtailments may be in force for the delivery points taking supply from that Welded Point while at the same time balancing gas is being used to keep the pipeline stable.

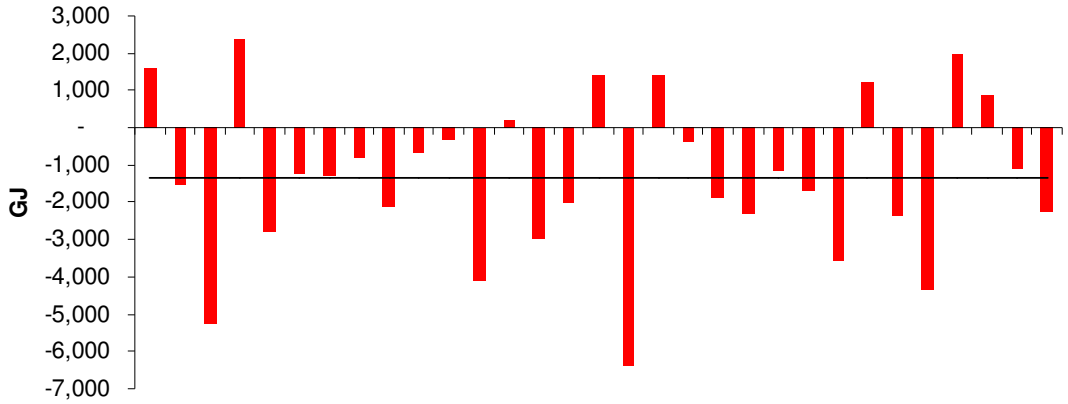
Situations of this type require a high degree of integration between the application of curtailment and the supply of balancing gas, and personnel able to make both types of decisions must be available continuously at short notice. Where these actions are being controlled by different organisations, (an independent Balancing Agent and a TSO as is proposed in the Rules), both organisations need to retain the capacity to handle a pipeline emergency requiring quick decisions at any time. This is unlikely to lead to an efficient use of resources or optimal performance in handling any emergencies that do arise. MDL continues to hold to the view, which was first expressed in its submission dated 13 March 2009, that an arrangement of this type is impractical.

Difficulties arising from TSO Imbalance Concept

It is generally recognised that for back-to-back balancing to work, action must be taken to ensure that the pipeline line pack is adjusted to compensate for loss or gain due to UFG, plus any gas purchased or sold by the Balancing Agent that is not matched by an equivalent purchase or sale to a pipeline user. The approach suggested in the Rules makes the TSO responsible for any such measured imbalance and requires that it not be allocated to pipeline users, but instead be allocated to the TSO's account.

This arrangement has a major flaw in that it makes the TSO responsible for all the day to day meter error in the transmission system even though, in the case of the Maui Pipeline, it is not the owner of, or responsible for, most of the meters. Day-to-day meter error in the Maui system can be large in comparison to the normal size of balancing actions being taken, as can be seen in Figure 2 below, which shows the daily fluctuations in UFG due to measurement errors. TSO's will therefore have liabilities resulting from their TSO imbalance obligations, without any ability to control the measured daily line pack fluctuations.

Figure 2: Maui Pipeline UFG, August 2009



Separation of the Residual Balancing Agent
Under the proposed rules the Balancing Agent is to carry out its functions independently of the TSO's.

- Looking at both transmission systems overall, three parties will have responsibility for adding and removing gas from the pipelines, the two TSO's and the Balancing Agent. Their respective obligations may call for opposing actions at the same time.
- The addition of a separate Balancing Agent handling only residual balancing increases the number of interfaces needed between the parties responsible for the control of transmission pipelines.
- If handled separately from other pipeline functions, residual balancing is an activity that may require action only a few times a month. However, the capacity to handle balancing actions has to be available continuously at short notice. This situation is unlikely to be efficient.

MDL believes that the proposed rules/regulations will prove to be impractical because they will add unnecessary complication to the operation of transmission pipelines. It also notes that they do not conform to good international practice as set out in the ERGEG principles, which provide for TSO's to be responsible for their own balancing.

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

User Obligations
MDL agrees with the proposition that the primary obligation to balance should be on pipeline users. However, the fact that there are currently different regimes between the two transmission systems means that the requirement to fulfil the "reasonable endeavours" obligation may be different depending on which pipeline the users are situated on. Similarly, rule 7 provides that users must provide information to the Balancing Agent as is necessary to enable the agent to carry out its functions. Again, the level of information that a user can provide will be different depending on the pipeline they are using.

TSO obligations

MDL considers that its current operating procedures and contractual arrangements for the provision of balancing gas services to the Maui Pipeline are consistent with, and do not unreasonably prevent, users meeting their obligations to balance in accordance with rule 6. The information provided for in rule 9 is generally available to users on the Maui Pipeline. We are not certain as to how difficult it will be to provide it for transmission pipelines beyond the Maui Pipeline. If it is not available this could cause problems in terms of the TSOs agreeing on what should be set out in the balancing plan and also the procedures to be adopted by the Balancing Agent.

The TSO has an obligation in Rule 6.3 to ensure that the actual line pack matches the target line pack after allowing for other user's imbalances and any balancing gas allocated to the Balancing Agent under Rule 19.3. It is impractical for the Maui Pipeline TSO to follow this rule due to the significant day to day variance in UFG calculation, which will form part of the TSO imbalance and which in the case of the Maui Pipeline amounts to plus or minus 4 TJ day to day. It is only possible to achieve this result within a set band or range. The revised Maui SOPs require action only when line pack varies from the calculated point by more than 5TJ. This point is discussed in more detail in an earlier section.

Balancing Agent functions

MDL considers that the major operational provisions in the rules are essentially an extension of the existing balancing regime that has been developed by MDL and is carried out by the current Balancing Agent on a day-to-day basis. For example, most of the informational requirements that are contemplated under the draft rules are already provided as far as the Maui Pipeline is concerned. In addition, Line Pack on the Maui Pipeline is managed directly by the Balancing Agent purchasing and selling balancing gas through a balancing gas market. This is managed though the use of the BGX website and use of the nominations regime under the MPOC.

The requirement in Rule 15.1.1 that the Balancing Agent balance back to the threshold is unnecessarily restrictive and will lead to an increased number of balancing actions and increased possibility of curtailments. The Balancing Agent should be left with the discretion, which it has at present, as to the amount of balancing gas to be purchased at any time.

Management of Line Pack

MDL considers that the key to enabling the Balancing Agent to manage line pack across different balancing zones is the extension of the OBA nomination balancing regime across the entire system. This will provide both users (including TSOs) and the Balancing Agent with real time information about their relative positions.

It is noted that the operational provisions of the rules require TSOs to provide operational information to the Balancing Agent which is a step in the right direction. However, MDL considers that in order to extend the existing Maui balancing regime on to the Vector system, it will be necessary for Vector to (or for the industry body to require it to) adopt a nominations regime to certain inter-connection points on the Vector system. The alternative to this may be to classify the Vector transmission pipeline as different balancing zones to the Maui Pipeline balancing zones and for line pack on the Vector system to be managed indirectly from the Maui Pipeline as is currently the case. However, this solution may not be consistent with the rules which require the balancing market to be open to all participants.

Balancing Market
MDL notes that many of the requirements of the rules are features of the existing balancing market under the BGX. A number of amendments to the BGX are currently under consideration. The main issue will be extending the BGX regime onto the Vector system so that shippers downstream of the TP Welded Point are able to participate in the market. This could mean direct line pack management on more pipelines/zones.

In a practical sense it simply may not be possible to open the balancing market up to anyone who wishes to participate as envisaged in r16. The problems of verification of performance and high tolerances at TP Welded Points cannot simply be wished away. They are being tackled through the ICD process. In addition MDL believes that industry shouldn't have to rely on GIC to give their approval for bilateral trades outside the balancing market.

To date MDL are the only organisation with experience in balancing markets and with experience making decisions on when to balance. Based on this experience, where lowest cost balancing is the objective, balancing decisions can be very difficult and often require a level of discretion. As noted above measures that remove this discretion are likely to be counter-productive as well as increasing balancing costs.

Allocation process
MDL agrees that balancing gas costs should be allocated as soon as possible after the balancing action is taken. This should be more achievable through implementation of the "back-to-back" cost allocation regime. As noted above the allocation process would be more effective if a MPOC-type nominations regime and OBA allocation of gas could be put in place, from and to major points on the Vector regime. This would allow operational imbalances and their financial consequences to be allocated directly to those welded points and without the time lag that the current Balancing Peaking Pool creates.

Coordination of compressors
In theory the TSO obligation in Rule 11 may seem reasonable. However in practice the TSO has the ultimate responsibility (and any liability) for its pipeline asset. On this basis it is incomprehensible that a TSO should have restraints placed on the technical operation of its pipeline by a party that has no obligation to manage the resulting technical and commercial risk.

MDL welcomes any analysis that will show how coordination of compressors will address the imbalance issues caused further down-stream. Its own views are that in most cases coordination will achieve little reduction in balancing cost unless there is line pack further downstream that is not required for the purpose of maintaining transmission capacity and which can be quickly made available for a reasonable period for balancing purposes. However, because useful downstream data is unavailable to MDL the real gains from coordination of compressors remain speculative.

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

Curtailment
The difficulties resulting from splitting the responsibility for the curtailment function away from the residual balancing function are set out above. They result from the decision to make the Balancing Agent responsible for residual balancing only. MDL's Commercial Operator has suggested a long term course of action that would combine all transmission pipeline operations under the control of a single entity. In the meantime the difficulties associated with any split in functions between residual balancing and curtailments must be addressed.

Damages
Currently the Incentives Pool provisions in the MPOC allow a Welded Party at a delivery point to make an Incentives Pool claim on a Day that it cannot take all its Scheduled Quantity of gas. This is the only remedy available if the Welded Party has a forced positive Operational Imbalance.

Back to back balancing removes the Incentives pool provisions from the MPOC, but most industry members have supported the retention of the ability of a Welded Party to claim damages in some form from another Welded Party whose actions have forced them into a position where they cannot take their Scheduled Quantity of gas.

MDL is preparing some options for consideration by the industry that will provide the means for damages actions. MDL believes that this topic has to be addressed in the context of any balancing proposal.

Tolerances
Tolerances must be resolved as a part of any balancing plan. They are currently being discussed as part of the ICD process.

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

The schedule to the Rules does set out the requirements for the balancing plan or plans which should be agreed between the TSOs. If theTSOs cannot agree the plan will be decided by the GIC. However there is very little detail in the schedule which governs how a balancing plan will be prepared in either case. Consequently it is difficult for MDL to comment on the issues which will need to be dealt with when the balancing plan is decided.

Nevertheless we note two issues that should be reconsidered:

- The requirement that the target line pack be set midway between the line pack threshold limits. This may not be the optimal point to reduce contingency events and keep down balancing costs.
- The requirement that a balancing action balance the pipeline back to the threshold, with the implication that it shouldn't go beyond. We note above that while it should be discretionary, this requirement, if it is intended, is unnecessarily restrictive and will lead to an increased number of balancing actions and increased possibility of curtailments.

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

Generally the plan lacks the detail for MDL to make a thorough assessment of what the potential implications of the proposed rules will be. This is important for a number of reasons including:

The GPS highlights key Gas Act (1992) objectives[16] that GIC must consider when recommending rules or regulations including:

- Incentives for investment in gas processing facilities, transmission and distribution, energy efficiency and demand-side management; and
- Delivered gas costs and prices are subject to sustained downward pressure; and
- Risks relating to security of supply, including transport arrangements, are properly and efficiently managed by all parties; and
- Consistency with the Government's gas safety regime is maintained.

Based on these selected objectives, MDL is concerned that the proposed regulations interfere with TSOs freedom to operate to such an extent that it removes the incentive for TSOs to invest further in their pipelines.

Another risk associated with imposed balancing arrangements is that delivered gas costs increase due to poorly conceived regulations. In this regard improving existing balancing arrangements is a positive objective; however the overall level of imbalance will need to be reduced to achieve real efficiency gains. It remains to be seen how downward pressure on delivered gas prices will be achieved when GIC have not yet defined any real problems with the existing regime.

An additional consideration is the risk to security of supply and maintenance of the Government safety regime. MDL is of the view that large sudden changes to balancing arrangements by way of regulation present addition physical and commercial risks that may be unmanageable for TSOs and ultimately which may not be managed effectively through the Gas Governance (Critical Contingency Management) Regulations.

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

No. In MDL's view the proposed rules should be abandoned, MDL's upcoming Change Request processed and the ICD process reformed into a more useful forum.

[16] Government policy Statement on Gas, April 2008, sections 11(c), 11(d), 11(e), 11(f).