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The Gas Industry Company
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10 October 2014 MPOC (Market-Based Balancing) Change Request Submission

1. Vector welcomes the opportunity to provide a submission on MDL's proposed Market-Based Balancing Change Request (**MBB**), and the draft cost benefit analysis which the GIC has commissioned in connection with MBB (**CBA**). No part of this submission is confidential.

2. Vector's contact person for this submission is:

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Introduction

3. Primary balancing on the Maui pipeline needs improvement and Vector supports that as the underlying motivation for MBB. However, for the reasons set out in this submission and its earlier submission to MDL dated 19 September 2014 (which is attached to this submission and should be read as part of it) Vector does not agree that MBB as currently proposed is necessary, or will improve primary balancing. Vector does not believe that the current costs of balancing warrant a change that will impose significant additional costs on the industry and end users. Vector believes MBB will impose detrimental costs on the industry without providing any benefit.

4. The gas industry is currently undergoing significant change, including to transmission access arrangements and improvements to downstream allocation, both of which might be expected to improve primary balancing. Further, the current OATIS system is due to be replaced and residential gas time-of-use metering is entering trial stages. Although these improvements are expected in the medium rather than immediate future, they are expected to improve information and other tools (such as increased nominations cycles) to enable better primary balancing. Vector believes that any significant measures intended to address primary balancing should be progressed in the context of these other changes. Otherwise, there is a risk of inefficient investment which could be rendered redundant in the short to medium term as system-wide improvements begin to be implemented.

5. Vector does not support the MBB Change Request. As requested in the GIC's email dated 24 October 2014, this submission sets out Vector's views on the draft CBA, including the appropriate status quo comparator, as well as some points concerning MBB in addition to those already set out in its 19 September submission.

Appropriate Comparison for Cost Benefit Analysis

6. The CBA proposes a comparison of MBB against both the MPOC currently in force, and the MPOC that would be in force if the back-to-back balancing change request (**B2B**) were implemented. MDL advised the GIC in its letter dated 17 October 2014 that MBB should be compared against the MPOC currently in force.

7. Vector notes that the B2B, having been supported by the GIC in a written recommendation in accordance with section 29.4(a) of the MPOC is now contingent only on MDL's consent. That consent cannot be unreasonably withheld or delayed: section 29.4(b). MDL has neither given consent, nor stated which, if any, of the grounds in 29.4(b) it intends to rely on to withhold its consent. If it does withhold consent (as it has signalled it will do if MBB does not receive GIC support), any of its Shippers or Welded Parties could raise a dispute.

8. Vector believes there should be certainty about the status of B2B so that the best use can be made of the GIC's consultant resource and so that the industry is best placed to consider the options before it. Vector therefore submits that before a final decision is made on the appropriate comparison for the CBA, the GIC should seek from MDL a statement as to whether it consents to the B2B as approved and if not, on which ground or grounds it relies to withhold that consent.

MDL's consent to B2B and MBB

9. Based on MDL's approach to the implementation of B2B, there is no guarantee that MDL will consent to MBB even if it receives GIC support. This is particularly a concern given the potential issues about interpretation of Commerce Commission requirements, which are outlined later in this submission and which Vector raised during the industry workshop on 5 November.

10. Vector believes that, at the least, there is uncertainty around the treatment of daily cash outs in the context of regulated revenue and that there is a possibility that the Commerce Commission may not agree with MDL's interpretation of the relevant requirements. MDL has so far not given a clear answer about whether they have confirmation from the Commission about how daily cash outs are to be treated.

11. Vector is concerned that without certainty about the impact of daily cash outs on regulated revenue, the industry could once again be put to the cost of assessing and submitting on a change request that ultimately MDL does not consent to because it subsequently decides the change has unintended adverse consequences for MDL.

12. Before requiring the industry to commit further time and resource to another change request, the GIC should require MDL to confirm in advance whether it consents to MBB in accordance with section 29.4(b) of the MPOC.

Draft Cost Benefit Analysis

Characterisation of amendment

13. While it acknowledges it is unlikely to have any impact on the outcome of the CBA, Vector is concerned about the characterisation of MBB as "mostly building" on B2B rather than displacing it[1]. B2B is a balancing regime premised on linking the costs of balancing transactions to causers where only the actual costs of buying or selling balancing gas are passed on to industry. MBB involves daily charges which are levied on industry participants for their individual imbalance, whether or not any physical balancing action is required on a day.

[1] CBA p7.

14. The two proposals are fundamentally different and it is simply not correct to say that one builds on the other.

Current balancing costs

15. Section 1.1 of the CBA reproduces a graph[2], which originally appeared in the GIC's quarterly report to 31 March 2014, showing a marked reduction in the monthly purchases and sales of balancing gas by MDL since 2006, and in particular since 2008.

16. MDL has advised that this graph is not an accurate representation of the true costs to the industry of balancing, which remain higher than the graph suggests. The CBA states that the costs of not achieving Taranaki Target Pressure are "several times" the costs of balancing transactions.[3] In its Disclosure of pricing methodologies and price changes[4] MDL records a net over-recovery of balancing costs of $257,000 in the pricing year ending 30 June 2014[5]. This suggests that the current arrangements are allowing MDL to recover its balancing costs in full.

17. If there are other costs arising from pressure issues, which MDL cannot recover as balancing costs, we would expect those costs to be quantified in the final CBA and compared against both current balancing transaction costs and the expected costs if MBB were implemented. Further, MDL should identify which of those costs it can recover other than through balancing charges. For example, the costs incurred by Vector running its compressors form part of its operational expenditure allowance under Part 4 of the Commerce Act. MDL should also explain why it did not allocate any of the $257,000 over-recovery of balancing costs to those "additional costs", if there were any, in 2014. If it did not believe it could do so (i.e. if it did not believe those costs fall within the definition of balancing costs) then it is doubtful that MBB will allow them to allocate daily cash-outs to those costs. If there were no additional costs, and MDL is in fact recovering its balancing costs in full, there would be appear to be no added benefit from MBB in terms of cost recovery.

Efficiency of balancing prices

18. The CBA notes that the BGX uses pricing spreads several times higher than those quoted on the liquid spot market operated by emsTradepoint, meaning the cost of balancing is likely to be inefficiently high[6].

19. Vector agrees that the cost of balancing is inefficiently high because of MDL's use of the BGX. Pricing would be more efficient if balancing transactions were carried out on a liquid spot market which all market participants are eligible to join. However, balancing costs should already be based on liquid spot market prices by virtue of section 11.10 of the MPOC. That section provides:

> "The Negative Mismatch Price and the Positive Mismatch Price shall be published on the MDL IX in accordance with section 4. These prices will reflect the Balancing Agent's costs in accessing and disposing of Gas. ***If a liquid Gas market develops, these prices will reflect the buy and sell spot prices in that market.***"

20. Efficient pricing is not conditional on MBB – MDL should already be setting market-reflective balancing prices when cashing out parties in imbalance, it is simply electing not to do so.

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[2] CBA p3.
[3] CBA p10.
[4] May 2014.
[5] Page 3 of the disclosure.
[6] CBA p 9.

21. Further, MDL's participation on a liquid spot market for balancing purposes should not be conditional on MBB. Vector acknowledges MDL has some concerns around operating on the spot market, including around visibility of information, given the market currently operates on the Vector side of the transmission system, but believes these can be addressed without the need for MBB as proposed. For example, Vector would not oppose the moving of the market to the Maui pipeline. Alternatively, if the market were to remain on Vector's transmission system, Vector is happy to work with its Shippers to provide additional information.

22. The CBA states that MBB will improve efficiencies because it requires *balancing actions* to be taken using the most cost effective methods which in some cases require trades through the emsTradepoint market.[7] This is true, but that only means that balancing should involve less cost to MDL.[8] The efficiencies gained by carrying out balancing actions on a liquid market will not be passed through to end users because they are cashed out regardless of whether a balancing action has been taken. The prices at which parties will be cashed out do not necessarily relate to the price MDL may have paid for a particular balancing action, and not at all where MDL has taken no balancing action.

23. The Cash-Out buy and sell prices as defined in MBB seem on their face to be market reflective, comprising a price per GJ intended to be the least favourable to the party being cashed out (presumably designed to be an incentive to the party to manage their own position at more favourable prices) plus the relevant transmission charge and trading fee, both also per GJ.

24. However, prices are referenced to either the highest balancing call (buy) or lowest balancing put (sell) price on the market on the day in question (i.e. on a day where a balancing action was taken) or by using the average market price and applying an adjustment where that would result in a less favourable price (i.e. higher for buy, lower for sell) than the least favourable market price on the day.

25. This "adjustment" is expressed as a percentage of the average market price on the day, and will be published on the BGIX. The value of the adjustment is not defined in the change request and can therefore be set at MDL's discretion, subject to an upper limit of ten percent. The CBA should assess MBB prices on the assumption that the maximum of ten percent will be the rate used.

26. Of some concern is the fact that MDL can avoid using the spot market to set balancing prices in certain circumstances, including where traded volumes on the market on the relevant day (and the day prior) are less than a specified amount.[9] That amount is determined by MDL at its sole discretion, with no limit specified in the MPOC, and can be amended at any time. There is no guarantee that this amount will not be set at a limit which precludes the use of the market in any event and allows MDL the ability to set its own balancing prices, with no restrictions.

27. Also of concern is the fact that MBB removes the requirement in section 11.10 of the MPOC for balancing prices to reflect prices in any liquid market. Combined with the fact MDL can restrict the use of market prices by requiring high trading volumes, MBB in fact weakens efficiency requirements for balancing prices.

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[7] CBA p10

[8] And, as noted in paragraph 16, MDL is already over-recovering its balancing transaction costs.

[9] Section 12.12(f) of MBB

Strength of incentives

28. The draft CBA states that MBB "creates strong incentives for primary balancing by shippers and welded parties"[10]. Vector does not agree with that proposition for two reasons. First, the financial incentives are not necessarily as strong as assumed by the CBA. Secondly, the lack of an information framework means parties are not able to avoid falling foul of thresholds imposed even if they are incentivised to do so.

Lack of information framework

29. MBB is based on EU balancing regulations which both "[increase] the financial responsibility of market players in balancing their portfolio" and "[equip] them with both standardised short term products and an information framework to do so".

30. MBB increases financial responsibility – the stated aim of the daily cash-outs – but does not provide the complementary information framework. While Vector acknowledges that providing some of those tools to Vector's Shippers is outside the remit of the MPOC, the reality is that Shippers who do not have sufficient information or other tools to enable them to manage their portfolio within tolerances may not even try. Daily cash outs will become a cost of their gas business, but on their own they will not incentivise better primary balancing.

31. Vector believes that some Shippers do have some tools to better manage their portfolios but it is unlikely they could do so in the timeframes proposed. To the extent that they are able to use those tools to manage their portfolios within the time required, Vector agrees that MBB provides some incentive for them to do so.

32. Vector agrees that the lack of an information framework, or additional tools to enable Shippers to manage imbalances on a daily basis will result in an inefficient allocation of risk and costs if MBB is implemented in its current form[11].

Weak financial incentives

33. Whether the financial incentive is strong enough to prompt better balancing is not yet established. If the CBA shows that failure to better manage individual portfolios will result in significant transaction costs to Shippers over and above what they pay now for balancing then it is arguable that there is a strong incentive. However, Vector believes that such an increase in cost should weigh against MBB as there is unlikely to be any benefit identified to balance that cost – i.e. if most Shippers are unable to materially improve their positions due to lack of an information framework, daily cash-outs will simply result in an additional cost on industry and end users of gas. This could be addressed by industry investment in tools to provide the information framework but that in itself is an additional cost to industry and end users, and one which should be incurred within an appropriate forum and with a comprehensive problem definition.

34. However, if the CBA shows that daily cash-outs will not result in an overall increase in costs to Shippers – which was suggested at the Industry Workshop on 5 November – because cash-out prices are closely linked to open market prices, then the incentive to balance daily can hardly be called strong. In fact, there will be no incentive to invest in additional tools to enable better primary balancing and there will be little change in behaviour.

35. Further, if amounts generated by cash-outs are returned to industry the following year through a reduction in transmission fees,[12] financial incentives are diluted again. The true cost to the industry will therefore be primarily through costs associated with

[10] CBA p 8.

[11] CBA p 11.

[12] The treatment of cash-outs in terms of regulated revenue is not clear – see paragraphs 44 to 53 below.

an increase in balancing transactions and the operational expenditure required to administer those transactions. All with little or no demonstrable benefit.

Over-pressure

36. Vector agrees with the CBA's observation that over-pressure situations may persist even after the introduction of daily cash-outs.[13] If Shippers are not equipped with tools to better manage downstream positions, there will be little actual change to the physical state of the pipeline even if Shippers' balancing costs increase. If MDL really wants to address high pressure, it should engage with the industry to identity the root causes and develop a solution which addresses those.

User benefits from pipeline flexibility and unpriced storage

37. Vector agrees that pipeline flexibility is accessed by some users more than others and the cost of that flexibility is currently not efficiently signalled to its beneficiaries. It also agrees that pricing pipeline storage may be more efficient, but does not agree that MBB addresses either of these issues, or at least not efficiently.

38. Pricing for pipeline flexibility and storage could be developed independently of MBB. However, Vector does not believe that providing formal storage or flexibility arrangements on the Maui pipeline will solve the issues of high pressure. The focus should remain on enabling and incentivising good primary balancing.

One-off system upgrade and ongoing internal costs

39. Until the industry has worked through the best way of managing pipeline imbalance and other related pipeline management issues, and while participants wait to see how daily cash-outs affect them, it is not clear to what extent investment will occur. Vector believes that the most efficient way for the industry to develop tools to manage imbalance is to do so collaboratively. Investment in systems to mitigate the impact of MBB may turn out to be at best inefficient or, at worst, redundant, when expected industry-wide systems are improved over the medium term.

40. Other ongoing costs will depend on the level of effort participants decide to devote to avoiding cash-outs. Some potential costs are set out later in this submission.

MDL's MBB Change Request dated 10 October 2014

41. Since providing its submission to MDL on 19 September, Vector has had the opportunity to consider the issues in more detail and has further points to either build on or add to those in that submission, in particular by quantifying some of the costs it expects to incur as a result of MBB. These are set out below.

No improvement to primary balancing

42. As mentioned above, Vector does not believe MBB will improve primary balancing or resolve balancing issues, such as high pressure, on the Maui pipeline. Incentives will not work unless they are combined with tools to enable better primary balancing. MDL's Shippers have previously (and repeatedly) sought to have nomination cycles increased, or at least to have nomination times changed, to allow Shippers to better manage their imbalance. These requests have been unsuccessful.

43. Most recently, at the industry workshop on 5 November, Shippers asked for a workshop to look at changing nomination cycle times in the context of MBB. MDL undertook to hold that workshop before the due date for this submission. No workshop has been held. This is an indication of MDL's unwillingness to engage with industry to address the true causes of balancing issues on its pipeline and develop tools to address them.

[13] CBA p8

Impact on regulated revenue

44. Vector understands that MDL intends to treat daily cash-outs as a recoverable cost under section 3.1.3(1)(c) of the Gas Transmission Services Input Methodologies Determination 2012 (**IM Determination**). That section provides that a recoverable cost is a cost that is:

> …a cost or credit arising from the GTB's purchase or sale of balancing gas that has not been –
> (i) allocated to a person shipping gas on the GTB's network; or
> (ii) recovered from or credited to persons having an interconnection agreements with the GTB.

45. If daily cash-outs are a recoverable cost (and Vector does not believe they are) then MBB is likely to result in a net over-recovery of MDL's costs of the purchase or sale of balancing gas[14]. MDL may, but is not required to, include negative recoverable costs (i.e. an over-recovery of recoverable costs, resulting in a credit which has not been allocated as set out above) in its allowable revenue calculations for the year following their recovery. If MDL were to include daily cash-out amounts which exceed its balancing transaction costs in its notional allowable revenue calculation for the following year, which it did for the current pricing year,[15] its notional allowable revenue would reduce. MDL would then have to reduce transmission fees (prices) to remain within its revenue cap.

46. There are pros and cons to this outcome. On the one hand, the industry would be meeting only MDL's true balancing transaction costs, and those costs would have been met by causers. Although those causers would have had to overpay in the year the charges were incurred, this would be partially offset by a reduction in transmission fees, socialised across all users, the following year.

47. However, the increase in transaction costs generated by more, and more frequent, cash-outs would not be off-set by reduced transmission fees and would be a sunk cost to the industry. Further, no account would be taken of use-of-money interest which, over a sustained period of over-recovery and which is not rebated until the following year, could be significant.

48. Further, there is no requirement on MDL to pass on any over-recovery in this way. In other words, daily cash-outs which exceed the costs of MDL's actual balancing transaction costs could be kept as profit outside MDL's regulated revenue cap. Section 11.10 of the MPOC provides:

> MDL undertakes that, as the operator of the Maui Pipeline, it shall not ***seek*** to make a profit or loss from its activities in relation to the sale and/or purchase of Gas used to balance the Maui Pipeline, or settle Mismatches and Running Operational Imbalances.

49. This section will be amended under MBB to include reference to daily cash-outs. However, Vector believes it does not impose a strong enough requirement for MDL to pass over-recoveries from cash-outs back to the industry.

50. MDL has stated that it believes daily cash-outs are a recoverable cost and can continue to be treated as described above. No doubt that is their preferred outcome, as it means they can account for any over-recovery in the following year by reallocating excess charges back to the industry through its allowable revenue calculation, as opposed to having to try and estimate them in advance (i.e. when setting transmission fees) to ensure they do not breach their price path.

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[14] Based on the fact that these costs were over-recovered under the current regime in FY 2014: see paragraph 16.

[15] See paragraph 16.

51. However, Vector considers daily cash-outs are a charge relating to supply of gas transmission services[16] and should therefore form part of MDL's notional revenue calculation for the year in which they are charged. The uncertainty involved in predicting the level of cash-outs for a year will make it difficult for MDL to set its standard transmission charges in a way that avoids breaching its price path. Further, changes in prices are required to be published 20 days before they take effect.[17] Daily cash-out prices are calculated daily and will not be able to be published in advance.

52. The industry has already experienced one change request – B2B – which, after years of industry time spent negotiating and putting in place changes so it could be adopted, MDL decided it did not want to implement, despite having proposed it in the first place, because of potential perceived adverse effects to MDL. Vector does not want to go through the same process for another change request which is ultimately rejected by MDL. Vector believes this is highly likely to happen if the Commerce Commission take the view that daily cash-outs are a transmission change and not a balancing cost, because of the volatility this would create in MDL's allowable revenue calculations and the increased risk of a price path breach. Vector submits that MDL should seek direction from the Commerce Commission before its MBB proposal is progressed.

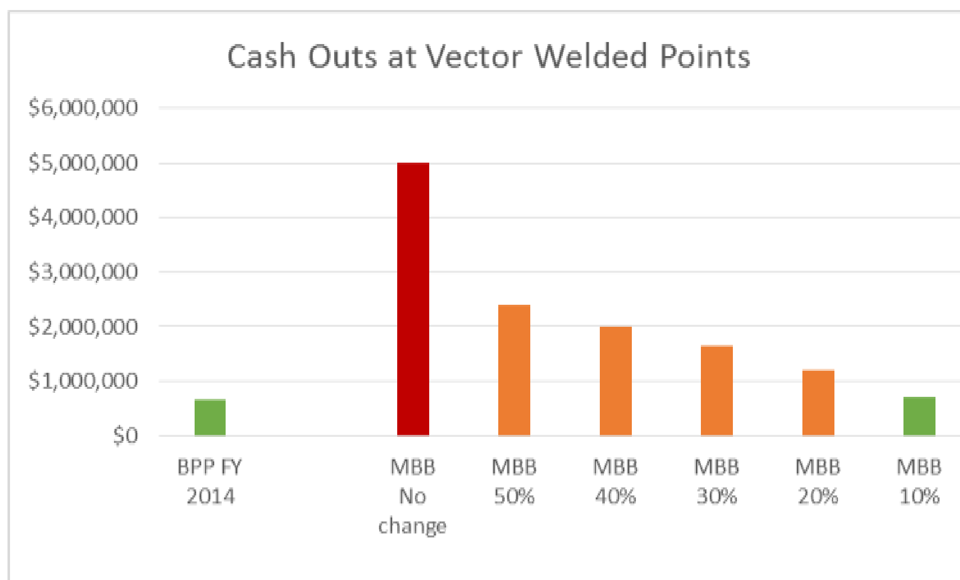
53. Of further concern to Vector is the fact that daily cash-outs will be charged to Vector as a Welded Party, with the expectation that they will be passed on to the relevant Shippers who caused the imbalance. Given the uncertainty about whether daily cash-outs are recoverable costs or transmission charges, Vector will want to seek confirmation from the Commerce Commission that it is able to pass those charges onto its Shippers.

Quantification of costs

54. The main cost to Vector is expected to be the increase in cash-out amounts it will have to pay. Vector transmission is usually liable for around 15 percent of cash-outs at its Welded Points[18] (the remaining amounts are allocated to Shippers). Currently most of these costs are recovered from Shippers as Vector's recoverable balancing costs. Whether it will continue to be able to do so is unclear, and Vector is seeking advice from the Commerce Commission about this. Separately, Vector's gas trading businesses are usually liable for around 12% of current cash-outs[19].

55. Vector has calculated the likely cash-out amounts at its Welded Points based on balancing and peaking data for the 2014 financial year. These calculations were made based using prices calculated in accordance with MBB. The graph below shows the likely annual cash-outs if there is no change in behaviour, and also what those amounts could be if Shipper behaviour changes as a result of MBB.

[16] As per the definition of "Prices" in section 3.1.1(6) of the IM Determination.
[17] Gas Transmission Information Disclosure Determination 2012, section 2.4.3.
[18] 16% in 2014.
[19] 10% in 2014.



Key:

BPP FY 2014 = the value of cash out transactions at Vector Welded Points in the 2014 financial year

MBB Cash Outs = the value of cash out transactions at Vector Welded Points under MBB, based on FY2014 data, assuming:
MBB No change: no change in Shipper behaviour
MBB 50%: actual OI does not exceed 50% of Scheduled Quantities
MBB 40%: actual OI does not exceed 40% of Scheduled Quantities
MBB 30%: actual OI does not exceed 30% of Scheduled Quantities
MBB 20%: actual OI does not exceed 20% of Scheduled Quantities
MBB 10%: actual OI does not exceed 10% of Scheduled Quantities

56. Vector believes that it and its Shippers can improve primary balancing performance to a small extent with the tools currently available to them. Therefore, the sum of cash outs likely to be incurred at Vector Welded Points is likely to be somewhere between $1 million and the $5 million shown on the above chart as the amount likely with no change in behaviour. That represents a potential increase in expenditure to Vector transmission of $642,800 per annum.[20] Without clarification from the Commerce Commission about whether Vector can treat those cash outs as arising from the sale or purchase of balancing gas, it is not yet clear how much of that additional expenditure can be passed on to Shippers as a recoverable cost. The potential increase in costs to Vector's gas trading businesses is around $533,000[21]. These will have to be either absorbed by the business or passed on to its customers as price increases.

57. Vector transmission and Vector's gas trading businesses both have better tools available to them to manage imbalance than some other Shippers, particularly those with a high number of mass market customers. We actively manage our imbalance position to avoid cash-outs under the current regime, although we do still incur them. We do not believe that we will be able to reduce our cash-out liability under MBB without material investment, and if that is the case for us it must be even more so for mass market Shippers.

58. For Vector to manage its position to the extent necessary to bring its liability down closer to current levels, we estimate minimum costs of around $220,000 per

[20] Being $750,000 (Vector transmission's 15% share of $5,000,000) less $107,200 (Vector transmission's 16% share of the FY 2014 cash outs).
[21] Being $600,000 (Vector gas trading's 12% of $5,000,000) less $67,000 (Vector gas trading's 10% share of the FY 2014 cash outs).

annum[22], with one-off IT costs additional to that. We have not been able to quantify all of those costs but it will ultimately involve replacement of the OATIS IT system. This replacement is already planned for and will be developed in conjunction with other improvements currently under discussion with the industry. Vector will not make any interim changes to OATIS before it is replaced, unless those changes can be made without material added expenditure. Aside from the possibility of changing nomination cycle times, we do not believe there are any changes that can be made to help mitigate parties' exposure to MBB daily cash outs.

Material adverse effect

59. As outlined in our 19 September submission Vector believes there may be grounds for it to issue a material adverse effect notice in relation to MBB. Aside from the material increase to Vector's liability for cash outs, as set out above, there are several other grounds, including:

    59.1. Increased operational expenditure on billing and associated administration, as the number of cash-out transactions will increase significantly;

    59.2. Potential changes required to the VTC to ensure ongoing compatibility with the MPOC. Vector is not willing to incur costs to ascertain whether changes are needed and what they might be until there is a decision about whether MBB is to be implemented, including binding consent from MDL under section 29.4 of the MPOC. This is especially so given that it incurred material expenditure in ensuring compatibility under B2B, which MDL has now decided not to implement;

    59.3. Potential Commerce Commission issues around passing on of daily cash outs, which Vector is in the process of investigating with the Commission;

    59.4. Although MBB does not require Vector to commit capital expenditure to improve tools for Shippers to manage their imbalance, it could come under increased pressure to do so. This is particularly so given the fact that daily cash outs could be characterised as a penalty, being an "incentive" to change behaviour where there is no real expectation that it will do so.

60. Vector repeats its submission that balancing and wider pipeline management issues should be addressed through an industry forum. Vector's Shippers have convened a working group, encompassing representatives from all parts of the supply chain, to address these issues and Vector supports that initiative as the appropriate and most constructive way forward.

Yours sincerely

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[22] i.e. 33% of current cash-outs at Vector's Welded Points.