



30 March 2015

Gas Industry Co
Level 8, The Todd Building
95 Customhouse Quay
PO Box 10-646
Wellington 6143

Trustpower Limited

Head Office
Truman Lane
RD 5
Tauranga

Postal Address:
Private Bag 12023
Tauranga Mail Centre
Tauranga 3143

T 07 572 9754
F 07 572 9825

Offices in
Auckland
Wellington
Christchurch
Oamaru

Freephone
0800 87 87 87

trustpower.co.nz

TRUSTPOWER CROSS SUBMISSION: Market Based Balancing Recommendation.

1 Introduction

1.1 Trustpower thanks the GIC for the opportunity to provide feedback on its Draft Recommendation on the 10 October 2014 Change Request (Recommendation). We believe that the Recommendation attempts to capture the general mood of the submissions received on the Change Request, but has not commented on whether the proposal is the best option available to industry, only that the GIC considers the proposal as an improvement to the current arrangements. This submission will focus on the costs that Trustpower expects to face, and some of the assumptions that have been made in the Cost Benefit Analysis (CBA), undertaken by COVEC, which we believe require further consideration.

2 Barrier to entry

2.1 Trustpower, as one of the newest retailers in the gas market, maintains our belief that the proposal will increase barriers to entry for new retailers. Primarily we believe that the proposal will increase the complexity that smaller retailers will face by increasing the necessity for more detailed forecasts, increased monitoring of positions, and more frequent management of position, leading to a decrease in margin, which larger retailers will face to a lesser degree. This will make it harder for new entrants to compete with larger, incumbent participants.

2.2 The GIC and COVEC have claimed that under Market Based Balancing (MBB) the gas market will become more certain, helping new entrant retailers by providing greater clarity about their position. Whilst it is correct that a participant will not need to worry about imbalances incurred on previous days, there will be little to no ability for small inaccuracies in forecasting to be washed up across a week. A new entrant retailer with a small portfolio of volatile customers will have significant errors in forecast consumption, relative to their actual off take. Under the current process the flexibility in the balancing arrangements allows these small participants to balance their position not only through portfolio diversification (which is minimal when they are small), but also through time, the latter of which is proposed to be removed under MBB. To improve accuracy in forecasting, new entrant's only real option will be to invest in new expensive technology, such as smart metering. When compared to just absorbing higher balancing costs this solution is unlikely to stack up for small retailers at this time, reducing their profit margin. As MBB does not propose to introduce any measures to help improve forecast accuracy, the incentive can only be considered a penalty.

2.3 Trustpower does not support undertaking balancing actions at a greater granularity than the information is available. As the proposal stands, the intent is to balance a participant every day; but only inform them of the balance actions undertaken against them once a month. All deviations between forecast and actual consumption will be cashed out, but the participant will remain uninformed of any variance to their forecast. There will be no signal for them to correct any systematic error in forecasting until a month has passed, and a significant cumulative

cash out has accrued. This will not lead to any improvement in balancing of small participants, but will lead to an increase in balancing costs for small retailers and the industry as a whole as a result of the increased number of balancing transactions. With no new information available, there will be limited ability to justify a change to forecasts or to correct for systematic forecast errors.

- 2.4 The increase in complexity, requirements for more balancing transactions, position management, and information will require an investment in systems, and additional staffing to ensure that Trustpower manages most effectively our imbalance exposure. At the moment this is undertaken by a central party, MDL, with minimal complexity and with a clear understanding of the net position of a pipeline. Disaggregating this to individual participants is more complex, placing a higher cost onto individual participants than MDL most likely faces now. As mentioned in previous submissions, the New Zealand electricity market understands that forecasting is best undertaken by a centralised operator, with a large sample size, accurate, transparent, and timely information. Forcing participants to manage this individually will lead in aggregate to greater forecast errors, as a result of increased complexity and the segmentation of the pipeline. We believe that though there is a cost to MDL to manage balancing, the benefit to the system as a whole is greater than the proposed MBB will provide.

3 Information:

- 3.1 The CBA has assumed that current arrangements will improve once MBB is implemented. This is inefficient, and implies that MBB will create a problem that will hopefully be remedied in the future. Many of the issues that need to be improved with the market are already known, and being worked on, but will take time to implement properly.
- 3.2 The current quality of metering information needs to improve to provide the market some confidence that participants are managing their positions appropriately. There are a number of instances where the information quality is of such poor standard that the signals sent to participants could lead to costly decisions. Figure 1 below shows that the consumption assigned to the residual profile, used for non-telemetry sites, at Lake Alice could lead a retailer to reserve more capacity, or face a cost of transmission over runs. This same inaccurate data could lead a retailer to forecast their mass market consumption incorrectly and make primary balancing more difficult as consumption is incorrectly allocated between participants. This is not an issue for a pipeline operator managing net imbalance positions as they look at the total pipeline flows, not individual participant positions. If the residual profile for the entire market cannot be calculated accurately three months after delivery, with complete information, the likelihood of a single retailer being able to estimate their offtake on a given day must be less. At the time this submission was prepared we remain of the view that this profile was not reflective of our customer's actual consumption but lack the information to explain or contest the residual profile.

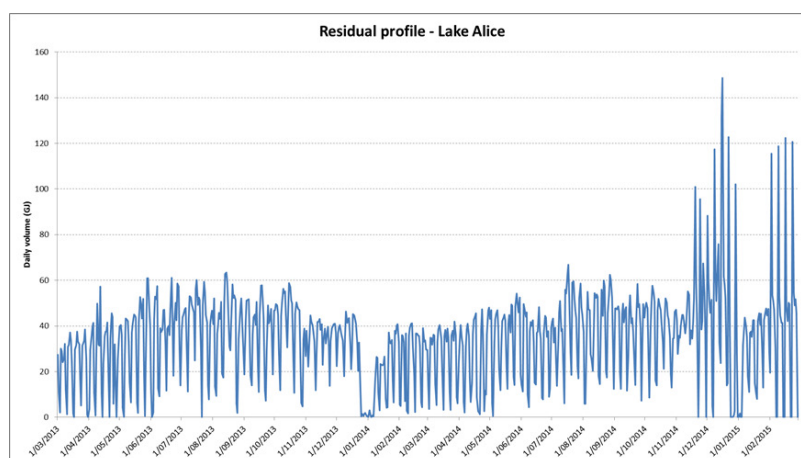


Figure 1: Lake Alice Residual profile allocation.

- 3.3 To ensure that retailers have accurate information to effectively manage their load, there will need to be a significant increase in the information available before MBB is implemented. If

this is not the case, then there will be significant inefficiencies caused by incorrect data. As Trustpower has indicated in earlier submissions, it is not efficient to penalise participants when accurate information is not available to signal that the participant needs to adjust their position. To assume that participants will improve their own information, but not consider this cost in the CBA is, in itself inefficient, and biases the CBA to consider only costs MDL is externalising.

- 3.4 To improve the information we currently have about customer consumption to the level of accuracy required under MBB would involve the deployment of smart meters to a significant proportion of our customer base. The technology for gas smart meters is still in its infancy, however leveraging off our knowledge of electricity smart meters, we conservatively estimate the incremental cost of installing and reading smart gas meters to be \$20 per ICP per annum. Assuming that at least half the gas ICP's in New Zealand will need to upgrade to smart meters, there will be an increased cost to the industry of \$2.5 million per annum. This is a cost that a single operator is able to avoid.

4 Pressure issues:

- 4.1 Trustpower recognises that there are periods when the pipeline pressure deviates beyond the target pressures, however reporting simply the number of days when there is a deviation beyond the target is a simplification, and does not necessarily reflect the duration of an over pressure event. Whilst 50% of days are beyond target pressure, there have only been 15% of hours beyond target since 2013. To impose wholesale change to the industry so that suppliers have a reduced operating risk for 15% of the time appears excessive, particularly in light of the costs that will be borne by downstream participants, which have not been considered in the CBA.

5 CBA Price comparisons:

- 5.1 The CBA has attempted to consider the cash out prices that will be experienced under MBB; however there has been little consideration to any correlation between prices and aggregate line-pack position. When the pipeline is long, most participants will be selling, pushing the price lower than the 3% deviation in the CBA. The CBA has been replicated below using the 10th and 90th percentile of prices since the inception of the platform. This yields a wider spread, and, in Trustpower's opinion, a more credible view of how prices will move to reflect the pipeline position. Due to current liquidity issues, this range would most likely be larger as more participants attempt to manage their position against fewer willing participants.

	Buy	Sell	BGX	EMS (COVEC)	EMS (Alt)	Spread Benefit	
						EMS (COVEC)	EMS (Alt)
				Buy	\$ 5.92	\$ 6.25	
				Sell	\$ 5.58	\$ 4.75	
2007	1760296	-3017829	-\$ 11.96	\$ 6.41	\$ 3.33	\$ 18.37	\$ 15.29
2008	2241171	-2307270	-\$ 17.07	-\$ 0.40	-\$ 3.05	\$ 16.67	\$ 14.02
2009	1812984	-2144281	-\$ 13.47	\$ 1.22	-\$ 1.15	\$ 14.69	\$ 12.32
2010	326469	-447000	-\$ 2.35	\$ 0.56	\$ 0.08	\$ 2.91	\$ 2.43
2011	262500	-303700	-\$ 1.96	\$ 0.14	-\$ 0.20	\$ 2.10	\$ 1.76
2012	291500	-87500	-\$ 2.47	-\$ 1.24	-\$ 1.41	\$ 1.23	\$ 1.06
2013	59500	-246550	-\$ 0.23	\$ 1.02	\$ 0.80	\$ 1.25	\$ 1.03
2014	80500	-203000	-\$ 0.47	\$ 0.66	\$ 0.46	\$ 1.13	\$ 0.93
2015	47000	-256500	-\$ 0.11	\$ 1.15	\$ 0.92	\$ 1.26	\$ 1.03
5 Year Average			-\$ 1.05	\$ 0.35	\$ 0.12	\$ 1.39	\$ 1.16

Figure 2: Cost Benefit Analysis excluding brokerage

- 5.2 Assuming that the last 5 years is representative of the costs that can be deferred by moving to MBB the benefit reduces by at least \$230,000 per annum.

- 5.3 In reality Trustpower expects that the prices will be further divergent from the market average price that we have used above, as in many instances there has been no opportunity to manage imbalance with the pipeline pressure is at the limits of the Target Pressure, leading to a lack of trading information at the limits of the possible price range.

6 Increase in costs:

- 6.1 The COVEC CBA has no regard to the increase in transaction costs for using the EMSTradepoint platform to manage imbalance positions each day. Currently moderate imbalance positions are carried by the market, with significant deviations forcing MDL to take balancing actions. Once MDL externalises this cost, other participants will be obliged to either take the incentive price used by MDL, or as intended by this proposal choose the prices on EMSTradepoint.
- 6.2 Historical daily line-pack implies that net daily imbalance can change by 10TJ per day on average. Assuming this is the volume that will be transacted on EMSTradepoint, and both parties face trading fees of \$0.075 - \$0.125 per GJ per participant, the cost to the industry will be to the order of \$550,000 to \$900,000 per annum. This is conservative as there are some off setting positions in this calculation, which will also transact. This is a cost to balancing that has not been considered in the CBA.
- 6.3 For small participants there will also be additional costs due to the requirement to have more systems and staffing to manage a more complex balancing regime. This is likely to be in excess of \$100,000 per annum.

7 Conclusion:

- 7.1 Trustpower has previously submitted against MBB as it currently stands. We are not opposed to the concept that users of pipeline storage should pay for it, however we do not agree with the implementation of the current proposal. We believe that the proposal will add cost and complexity to participants, particularly smaller retailers and those looking to enter the market. If, as has been indicated, the GIC still considers that this proposal is the correct direction for the industry to take, then Trustpower requests at the very least the CBA be corrected to more accurately reflect the true costs to the sector and that implementation is delayed until appropriate procedures are in place to assist participants to effectively manage their position. We believe that this can be achieved primarily by more timely and accurate information about consumption on the various pipelines, and at least, an accurate daily allocation and adjustment process. Failure to implement these fundamental changes will change the incentive for primary balancing to become a penalty for participation in the gas market.
- 7.2 For any questions relating to the material in this submission, please contact me on 07 572 9888.

Regards,



Craig Schubauer

Wholesale Market Manager

Market Based Balancing (MBB) - January 2015 Cross submission