

15 September 2014

Commercial Operator
Maui Development Limited

WELLINGTON

Attn: Matthew Wilson



via email: matthew.wilson@mauipline.co.nz

Dear Matthew

RE: MARKET-BASED BALANCING CHANGE REQUEST PRE-CONSULTATION

Transpower New Zealand Limited, trading as emsTradepoint (**emsTradepoint**) welcomes the opportunity to provide feedback on Maui Development Limited's (**MDL's**) proposed 'Market-based Balancing Change Request' (**MBB CR**) prior to it being submitted to the Gas Industry Company.

emsTradepoint supports the MBB CR and believes it will deliver a more economically efficient, equitable and stable transmission service. The MBB CR also supports the growth of the fledgling emsTradepoint natural gas wholesale market.

Balancing Gas

A cornerstone of the MBB CR is acknowledgment from MDL that it will begin purchasing and selling balancing gas on the wholesale market. This is a significant improvement on the status quo, where MDL continues to utilise the Balancing Gas Exchange (**BGX**) to procure balancing services.

At time of writing, BGX order prices were \$8.65/GJ (Call VWAP) and \$0.99/GJ (Put VWAP). This means the Call/Put spread was \$7.66/GJ¹ - approx. 133% higher than the fair market value of gas² itself. This results in a large amount of foregone revenue (put sales) and additional costs (call purchases) against the alternative of utilising the emsTradepoint market. It also produces windfall gains and undue advantage to those few parties that are able to participate on the BGX, subsidised by those that pay tariff and receive cash outs.

We estimate that MDL has foregone ~\$882k of put gas revenue and incurred ~\$230k of additional call gas costs against the alternative of utilising the emsTradepoint market since it was established in late 2013. This has resulted in a net ~\$1.1 million negative impact against the counterfactual of using the spot market.

The following table sets out the potential impact of sustained use of the BGX in favour of the emsTradepoint alternative, using historic BGX transactions³:

¹ BGX Spread = VWAP of ID3 Call stack – VWAP of ID3 Put stack

² The average price for gas traded on the emsTradepoint market is \$5.75/GJ

³ BGX transactions set against the average spot price of \$5.75/GJ. OBG facility trades were discounted.

Table 1: BGX Put Revenue / Call cost versus emsTradepoint Proxy

	Put	Call	OBG Leveller	Total
2011 (proxy)	-\$766,435	-\$541,310	-\$539,128	-\$1,846,873
2012 (proxy)	-\$496,642	-\$189,347	-\$312,950	-\$998,939
2013 (part-proxy)	-\$1,034,550	-\$167,660	\$0	-\$1,202,210
2014 (counterfactual)	-\$737,740	-\$167,645	\$0	-\$905,385
Total variance	-\$3,035,367	-\$1,065,962	-\$852,078	-\$4,953,407
Since emsTradepoint launch	-\$881,930	-\$229,335	\$0	-\$1,111,265

Our analysis shows that, if MDL adopts the spot market for balancing transactions going forward, there is a baseline saving to industry of approx. \$1.4 million annually.

Aside from emsTradepoint believing MDL should be using the spot market today, this would be solved under the MBB CR as MDL would be required to utilise the spot market to purchase balancing gas. The industry would see material savings as a result. Peaking charges would also be significantly lower than under the current MPOC, but this has not been factored into the numbers in Table 1.

Section 12 Cash Outs

Another notable improvement proposed under the MBB CR is referencing Section 12 cash out prices to the spot market. The BGX currently sets cash out prices and, as noted above, those prices are extreme when compared to the spot prices seen on emsTradepoint to date.

Setting cash out prices at a spot market reference price will have significant improvement in equity to parties that incur cash outs. It will also allow parties to manage their risk efficiently by being able to influence cash out prices and hedge cash out volume and price risks. This is a crucial tool for industry and something that is in place in all other applicable jurisdictions.

Daily Cash Out Regime

The MBB CR introduces a daily cash out regime, where Welded Points are cashed out under section 12 of the MPOC each day for Running Operational Imbalance above Running Operational Imbalance Limits.

Aside from improving the operational / asset risks put forward by MDL in the 27 August workshop, by providing a more appropriate incentive on parties to match their nominations with scheduled quantities, daily cash outs are a crucial element in improving market efficiencies. This is due to the following reasons:

1. **MDL won't use the current emsTradepoint spot product.** MDL has stated that it lacks sufficient comfort and transparency that balancing gas will be delivered on the day of purchase to use the current emsTradepoint spot contract with delivery on the Vector SKF pipeline. Without commenting on the validity of MDL's concerns, the root of the issue (as we understand it) lies in the MPOC ILON regime and emsTradepoint's delivery point being off the Maui pipeline.

The MBB CR will deliver a greater level of assurance to MDL that gas will be delivered in the time period for which it is nominated, which unlocks MDL's willingness to begin using the spot market for balancing gas and cash out prices.

2. **Exchange-traded gas must be delivered under standard code arrangements.** emsTradepoint has noted this in previous publications but, to clarify, a liquid market will only successfully develop if the terms of physical delivery are the same as the alternatives (such as bilateral deals). At least, they cannot be more punitive.

This is currently the case for emsTradepoint, as its gas contract listing is delivered on the Vector SKF pipeline and has Vector dealing directly with its Shippers. All gas is delivered under identical (and standard) terms. However, the version of the MPOC currently in effect requires imbalances at Notional Welded Points (markets) to be cashed out every day. Physical Welded Points, on the other hand, are granted the Imbalance Limit Overrun Notice (**ILON**) regime, where imbalances can be rectified across multiple days prior to cash out.

The daily cash out regime put in place by the MBB CR would allow gas traded via a market to be delivered on identical terms to all other gas. (**Note:** This assumes a standard Interconnection Agreement will be given to emsTradepoint to establish a Maui located trading hub).

Another consideration for daily cash outs is improved 'cost to causer' allocation, maintaining the original goal of the 'Back to Back' Change Request, but without the operational risk and economic inefficiency of swings in linepack that were foreseeable under that regime.

Link to Electricity Security of Supply

A further benefit of the MBB CR and daily cash outs is improved efficiency in the electricity market. The electricity market is settled on a marginal basis to ensure the industry receives the necessary signals to invest and maximise security of supply. This relies on the marginal price signal informing the most economical use of resources, such as natural gas as a generation fuel.

Currently, however, the 3-day ILON regime undermines the marginal electricity price signal and doesn't allow it to properly flow through the gas supply chain. The risk (and economic cost) is that gas is not freed up to flow to additional electricity generation when needed because the price signal is lacking.

The proposed change to the code will require pipeline users to ensure they have good (and timely) title to gas on the day they take it, or face a daily forced sale/purchase (cash outs) at prices referenced to the spot market. Specifically for the electricity industry, it will require thermal generators to either (a) procure the gas on the spot market, or (b) be cashed-out at a market reflective price. As such, the gas spot price should begin to reflect the electricity price at times and allow the electricity marginal price signal to work as intended – that is, to signal price and allow resources to flow to the electricity market when it represents the highest economic use.

We suspect that the Electricity Authority will be enthusiastic about the electricity wholesale market marginal price signal making its way to the gas supply chain, and the associated economic benefits.

MBB CR Variables

The MBB CR has two settings that we encourage industry to fully consider. These include:

- **The percentage 'adjustment' in section 12.12.** This is a percentage increase (for negative cash outs) or decrease (for positive cash outs) made to the Average Market Price that cannot be more than 10%. We encourage industry and MDL to debate at what level this should be initially set; our recommendation would be to set it at 5% at the start; and

- **The 'ROIL Multiplier' in section 12.18.** This is a multiplication of a Welded Point's tolerance (noting that it cannot be less than zero). It has two applications; to provide the industry with a 'soft landing', and to provide an ad hoc temporary tolerance adjustment facility. We encourage industry to consider how much time is required to efficiently comply with the proposed MBB CR regime and negotiate the terms of the soft-landing with MDL prior to the MBB CR being submitted to the GIC.

Comments On Process

We note that there was some call for an industry working group to be formed to essentially 'start again' to find a solution to the enduring issue of balancing. emsTradepoint's opinion is that the MBB CR proposal forms a good base to build on and provides a composed solution that will prove to be correct, efficient and enduring. It is also contextually consistent with previous industry-initiated work streams and will support the intentions of the Gas Act. As such, we encourage MDL to proceed with a formal submission to the GIC.

Much like the Back-to-Back change request, however, the MBB CR again highlights some downstream inefficiencies that are deserving of consideration. Whilst this should not delay the MBB CR, we encourage MDL, the GIC and industry to form a working group to consider, amongst other things;

- daily allocation provisions (D+1);
- revising the intra-day cycle times;
- starting the gas day at 6am; and
- appropriate and fair tolerances.

The ROIL Multiplier provides the industry with some time (currently drafted to the end of 2015) to implement changes to downstream arrangements to improve the end-to-end efficiency of the industry. This should be sufficient time for a working group to deliver outcomes. emsTradepoint is happy to support this parallel process to the fullest extent possible.

Sincerely

James Whistler
emsTradepoint

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