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Ms. Keston Ruxton  
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Regulation Branch  
Commerce Commission  
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Dear Keston,

Please regard this letter as our further input for the Input Methodologies review focusing on the Gas pipeline default price-quality path reset 2017. This is in response to the Commission's invitation to provide further comments following the gas stakeholder meeting on 8 December 2015. In this letter we will use the terms "MDL", "we", "us" or "our" to refer to the Gas Transmission Business (GTB) of Maui Development Limited.

We greatly appreciated having the gas stakeholder meeting. We will set out our current comments under the same headings as the topics covered in that meeting, albeit in order of priority for us. We will also limit our current comments to those topics. We refer to our previous submissions on the IM review problem definition paper, and to an upcoming submission on the "Update paper on the cost of capital topic", for other comments.

## **Form of control and pricing**

We strongly support the Commission's point of view expressed at the gas stakeholder meeting that: "it is important that the form of control does not create barriers to efficient pricing".

Unfortunately, the current form of control for GTBs actually does create such barriers. It may even disincentivise more efficient pricing methodologies. Our main concerns are set out below under the following headings:

- Use of notional revenue quantities impedes optimally efficient pricing
- GTBs should be subject to a pure revenue cap
- Gas transmission pricing methodologies and principles should be addressed by GIC

### **Use of notional revenue quantities impedes optimally efficient pricing**

GTBs are currently required to ensure price-path compliance prior to the start of a new pricing period, using notional revenue quantities from a previous pricing period. This impedes optimally efficient pricing for two reasons.

Firstly, the two-year time lag between notional and actually realised revenue quantities exposes GTBs and consumers to two years of demand risk.

- If pricing is based on throughput only, as is currently the case for the Maui Pipeline, then this risk could be regarded as symmetrical. (Which is not necessarily efficient.) If throughput declines then we are still required to set tariffs based on higher throughput quantities from two years ago. This leads to lower tariffs (i.e. less than intended) that may not let us recover our allowable costs for a current pricing period. Alternatively, if throughput increases we could set tariffs based on the lower historical quantities and realise a windfall profit, while consumers would pay more than the Commission intended as necessary.

- This is particularly relevant in transmission where demand can be “lumpy”. Changes at a single customer can lead to material changes in demand for transmission services. Relevant examples in recent years are provided by the recommissioning of methanol trains by Methanex and the closing of power stations by Contact Energy and Mighty River Power.
- The reduction of gas-fired power stations for base load generation may also increase volatility of transmission demand. The proportion of gas used for electricity generation at peak load demands may increase in future. This means that predictability of gas transmission throughput is declining, while historical demands (used for notional revenue quantities) may be an increasingly poor predictor of future demand.
- As a result, a GTB would rationally seek a pricing methodology that reduces its exposure to declining revenue quantities. This means the notional quantity concept could make it difficult to evolve pricing approaches in more efficient ways.

Secondly, the requirement to use revenue quantities from two years ago makes it difficult to introduce more dynamically efficient pricing. In particular, it imposes barriers on having transmission product prices that can change dynamically during the course of a year.

- The current requirement to ensure compliance with a notional revenue cap prior to the start of an Assessment Period leads to static prices that must be fixed in advance.
- This makes it difficult to introduce the auction-based pricing that has been proposed by Gas Industry Company Limited (GIC) to improve efficiency of transmission capacity allocations. Capacity auctions are common in other jurisdictions and mandatory in the EU. While it might be possible to conduct auctions prior to the start of an Assessment Period, it is less clear whether we can maintain compliance with a notional cap for auctions held during the course of a pricing period. This could make it difficult to introduce auction-based pricing for shorter-term capacity allocations; for example, a quarterly capacity product.
- It could also make it difficult to introduce congestion management pricing. Such pricing could be expected to depend on the level of congestion on a specific day when it would become applicable. We do not know how this could be made compatible with static pricing that needs to be determined in advance.

All of these barriers to efficient pricing are bad for consumers.

### **GTBs should be subject to a pure revenue cap**

The easy solution to eliminate these barriers is to move to a “pure” revenue cap that does not depend on notional or lagged transmission quantities. This should enable GTBs to realize their actually allowed revenue in each pricing year, with appropriate mechanisms to deal with unintended over- or under-recoveries.

Implicit in the above is our consistent view that we still consider a revenue cap as the most appropriate form of control for gas transmission. Reasons for this include the following.

- GTB costs are mostly fixed and depend very little on the level of throughput.
- Our pricing can do very little to affect overall gas transmission demand. The two largest consumers of gas in New Zealand are connected directly to the Maui Pipeline. (We do not have any other directly connected gas consumers.) Their transmission costs can be assessed as follows.

- Methanex (which offtakes more than half of all gas transmitted through the Maui Pipeline) incurs transmission costs, depending on the origin of gas, ranging from 0.08 to 0.18 \$/GJ.
- The Huntly Power Station of Genesis (which is forecast to offtake 15% of gas transmitted through the Maui Pipeline during 2016) incurs transmission costs, depending on the origin of gas, ranging from 0.44 to 0.55 \$/GJ.
- These transmission costs can be compared to a quarterly index per 31 December 2015 for gas prices traded on emsTradePoint (FRQI) of 5.45 \$/GJ.
- For smaller gas consumers (that are not directly connected to the Maui Pipeline) our transmission fees are likely to have an even smaller impact on their overall cost of gas. Accordingly, changes in our transmission pricing are unlikely to have any material impact on gas consumption.
- It may also be relevant to note that most consumers of gas transmission services, as well both of our directly connected consumers of gas, are actually larger in size and scope of operations than we are. To the extent that price risk needs to be allocated, we would argue that our customers have more ability to absorb such risk than we do.

Another important consideration is that implementation of a “pure” revenue cap could avoid potential barriers to operating code convergence for the Maui Pipeline and Vector pipelines that is a major workstream for GIC.

### **Gas transmission pricing methodologies and principles should be addressed by GIC**

Assuming that a “pure” revenue cap leaves GTBs neutral with respect to pricing methodology, the next question becomes how gas transmission pricing can be made most economically efficient. This includes the question of how to allocate transmission pricing, i.e. the pricing methodology.

Changes to pricing methodologies could be subject to several types of constraints.

- Our current pricing methodology is prescribed by the Maui Pipeline Operating Code (MPOC). This methodology was designed at the start of the open access regime for the Maui Pipeline. We are not at liberty to change this ourselves. It can only be changed after formal industry consultation and with a positive recommendation from GIC.
- Pricing approaches by Vector’s GTB are constrained by the Vector Transmission Code (VTC). Vector is not at liberty to change this by itself. The VTC can only be amended if supported by a majority vote from shippers under the VTC.
- The Commission has included pricing principles in the IMs for GTBs. We have previously submitted on the odd status of these principles. They are voluntary under a DPP, but they could be used for a mandatory pricing methodology determined by the Commission in case of a CPP.

We expect that a review of gas transmission pricing methodology would be most appropriately conducted by GIC as part of its code convergence workstream. In addition to this broad initiative, we note that GIC already has regulatory powers to set access terms and conditions for the Maui Pipeline specifically.

We do not have firm views on the need to maintain pricing principles in the IMs for GTBs. We note that these were adopted from the Gas Authorisations for distribution companies. We are not sure to what extent these principles have ever been assessed as suitable for gas transmission specifically. (Our submission from July 2009 on the Commission's IM Discussion Paper at the time merely observed that: "These principles appear reasonable.") If they are to be maintained, however, and potentially used as basis for a future gas transmission pricing methodology, then we propose that they should be reviewed in collaboration with GIC as well.

## Treatment of major projects

One of the key questions for us in the IM review is how to deal appropriately with the "lumpy" pattern of expenditure that is a normal feature for GTBs. These "lumps" represent projects that need to be undertaken in addition to base levels of expenditure. Excluding catastrophic events and change events already provided for in the IMs, we suggest three categories of projects need to be considered.

1. Recurring projects with low frequency. Examples for this would be pipeline pigging and compressor turbine overhauls. These projects could represent material expenditure in years when they occur, but are infrequent. For example, our last compressor turbine overhaul was in 2010 and we do not expect to need one during the current regulatory period. However, both of our compressor units are expected to need an overhaul during the next regulatory period. While the need for these types of projects is known in advance, their cost and timing can be assessed only approximately at the start of a regulatory period. The specific timing of a compressor overhaul, for example, depends on the assessed condition and on the number of running hours for each turbine.
2. Known one-off projects. Our best example is the White Cliffs project which has been discussed previously. The need for this project is certain, but the timing, approach and cost forecast for implementing it is still subject to uncertainty.
3. Unknown projects. These could be further sub-divided into categories of foreseeable contingent projects and unforeseen projects. The line between these sub-categories could be blurry. For example, we have active land monitoring activities at several locations along the Maui Pipeline that could lead to a project if conditions deteriorate. Such projects could be considered foreseeable. Land conditions could also deteriorate rapidly at other locations along the pipeline. In this case, remedial actions could be considered as an unforeseen project, even though their nature is the same.

The approach used in determining the DPP for our first regulatory period was unsuitable for dealing with any of these categories of projects. In particular, the imposition of a cap on capital expenditure increases above a historical average can make it impossible for us to obtain a return on investment for projects unless we apply for a CPP.

We will not use this letter to repeat the many problems with the current CPP process. We acknowledge that the Commission is fully aware of these, and hopefully working on a CPP "lite" approach that can simplify the process when appropriate. Even if a CPP "lite" process is developed, however, we do not consider this should be required for all major projects at a GTB.

The "lumpy" nature of expenditure of GTBs is a business-as-usual feature; not an exception. If we need to submit a CPP for every "lump", even in a "lite" version, this would drive up costs, delay project implementations, and ultimately not be in the interest of consumers.

We also note that it would not be unusual for a GTB to be faced with more than one “lumpy” expenditure during a regulatory period. If it were necessary to apply for a CPP driven by one project, the timing and cost forecasts for other projects may still remain highly uncertain at the time of application. We assume it is not the Commission’s intention to allow multiple CPP applications for multiple “lumps” occurring during a regulatory period. (Given the likely cost and complexity of dealing with repeated CPP applications we also do not advocate for such an approach.) Therefore, a mechanism to accommodate uncertain future projects (that are not unusual) in a price-quality path determination for GTBs is necessary in any case. We submit that such a mechanism should be built into a DPP for GTBs.

We suggest that a “listed project” approach, as provided in Transpower’s IPP, may be a starting point for such a mechanism. Instead of forming part of base expenditure, however, a “listed project” for a GTB could be represented by a project that exceeded a percentage over base levels of the GTB’s annual recurring expenditure.

We do need to point out that major projects for a GTB can consist of opex as well as capex. Piggings expenses, for example, do not lead to the creation or life extension of an asset and would be treated as opex. As another example, land monitoring and remediation expenses for locations at risk along the pipeline may be difficult to classify, and could consist of a mix of opex and capex. The most appropriate mix may not be known in advance. Future arrangements should ensure that projects are not unnecessarily delayed, or artificially structured, and that one class of expenditure does not get favoured over another.

## **Quality of service and security of supply**

Designing suitable quality measures and providing confidence in security of supply are likely to be related issues; particularly for gas transmission. Finding solutions remains a challenge. We agree with the Commission’s judicious comment that the current measure for response time to emergencies (RTE) is somewhat “bland”. It is not particularly useful for a GTB. However, it has so far not been a priority for us to come up with something better.

Vector made a wider reaching comment to say that there is a significant difference between distribution and transmission when it comes to quality. We would indeed expect that consumers of transmission services are different from distribution customers, and would have different views and experiences. Accordingly, we propose that work on quality measures for GTBs and GDBs be considered separately.

With respect to GTBs, such work needs to recognize that finding a suitable output measure for the quality of gas transmission services will be difficult. As an example, our customers may be concerned with the number of curtailments. In the vast majority of cases, however, curtailments are caused by third parties and are outside the control of a GTB. Therefore, the total number of curtailments cannot reflect the quality of a GTB’s operations. If the quality measure were restricted to curtailments caused by a GTB itself then the number could be zero in most years. For statistical purposes this would be no better than the current RTE measure.

This example illustrates a more general feature of gas transmission service quality. The output quality provided by a GTB tends to be stable most of the time, and is only affected by events occurring with a low frequency. In many years such quality degrading events may not occur at all. Therefore, redesigning output quality measures may not be particularly useful for a GTB.

In order to assess the operational quality of a GTB we propose it may be more appropriate to focus on process quality.

Such work could build on assessments and processes that are already required for other regulatory purposes. For example, the certification process for transmission pipelines requires the existence of a quality management system, which must include quality assurance and continual improvement processes. Compliance with applicable standards must be certified by an independent inspection body. We expect this could be used as a basis to provide consumers of GTBs with more information about the quality of operations and security of supply.

We also note that at this stage it is not obvious to us how a process quality assessment could be used in the context of a DPP. As a practical matter, we could support leaving the RTE measure in place in its current form for the next DPP reset; despite its blandness. We propose to expand information on process quality in the context of further work on Information Disclosure requirements.

Questions around quality and security of gas transmission services are of interest to a variety of stakeholders. In addition to members of the Major Gas Users Group (MGUG) and consumers of gas transmission services this could also include other regulators such as MBIE and GIC. (We note that Powerco suggested GANZ as a forum to address questions around quality of distribution services, but we do not expect this to be most appropriate for transmission.) We are willing and interested to pursue further work on such questions in a working group with those stakeholders.

### **Incremental rolling incentive scheme (IRIS)**

We have addressed issues and problems for implementing an IRIS in our previous submissions. The key problem remains that any IRIS calculated on the basis of differences between actual and forecast expenditures, requires accurate and unbiased forecasts to begin with.

For GTBs, such forecasts do not currently exist.

- In our own asset management plan, our estimated costs for the White Cliffs project make up more than half of our projected capex over the next 5 years. While we do consider these estimates to be unbiased, they are necessarily based on assumptions about when and how the project will be implemented. As we indicated earlier, the actual timing and approach for implementation are still subject to uncertainty. Considering the magnitude of costs for this single project, this means even our own forecasts are subject to considerable uncertainty and may be materially amended when the project firms up.
- We have also included line items with a simple recurring "Allowance for future works" under several capex categories in our asset management plan forecasts. These line items are intended to make a reasonable provision for unknown projects over the term of the forecasts. By their nature, however, these line items are not intended to provide a reliable estimate for expenditure in any given single year.
- In setting our current DPP, the Commission applied a 20% cap to increases over our historical aggregate capex. The result of that approach was that we received capex allowances for significantly less than our own forecasts of annual capex, while simultaneously receiving a pro-rated proportion of the forecast costs we had at the time for the White Cliffs project. This led to Commission forecasts that were very unreliable and significantly biased.

As a result, we do not support any IRIS that depends on forecasts of aggregate expenditure for a GTB.

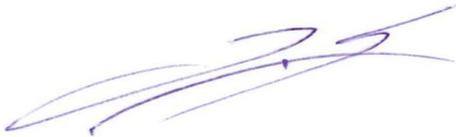
We have previously expressed support for the objectives of an IRIS. It may be possible to design a feasible scheme for GTBs if it were limited to base expenditures, and excluded major projects with uncertain costs and timing (i.e. all three categories of major projects described earlier). In other words, an IRIS that excludes “lumpy” expenses of a GTB.

However, our enthusiasm to pursue such efforts is not high. Even if it could be designed, we are concerned that the problems and costs with managing and maintaining an appropriate IRIS for GTBs, that excludes major projects while including transitions between CPPs and DPPs, may be larger than the problems that an IRIS is intended to address. Such problems also need to take account of the potential distortions caused by structuring expenditures as opex or capex. A cost-benefit analysis of designing, implementing and maintaining a practical and effective IRIS at GTBs could turn out to be negative. In that case, undertaking such efforts would not be in the interest of consumers either.

## Conclusion

We have appreciated the opportunity to provide these comments. For any additional questions or clarifications please do not hesitate to contact us.

Yours sincerely,



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**for Maui Development Limited**