



Maui Development Limited

Disclosure of pricing methodologies and price changes

May 2016

## Disclosure of pricing methodologies and price changes

This document represents our disclosures of our pricing methodologies and price changes for our pricing period from 1 July 2016 to 30 June 2017, as required by clauses 2.4.1 and 2.4.19 in the Gas Transmission Information Disclosure Determination 2012 (consolidated in 2015) issued by the Commerce Commission. The terms “MDL”, “we”, “us” and “our” in this document refer to the Gas Transmission Business of Maui Development Limited.

### 1. Pricing methodologies

#### MPOC requirements

Requirements for the pricing methodology to be used by MDL are set out in the Maui Pipeline Operating Code (MPOC). The principles for setting our tariffs are set out in Schedule 10 of the MPOC, as presented in full below.

#### **SCHEDULE 10 TARIFF PRINCIPLES**

MDL will set the Transmission Charges in accordance with the standard practice adopted by utilities businesses in New Zealand.

Accordingly, MDL will recover the cost and return of capital as follows. MDL will

- (a) calculate the Maui Pipeline’s Optimised Deprival Value or Optimised Depreciated Replacement Cost and multiply this value by a nominal WACC, and then subtract any revaluation gains/losses on the asset (“Required Return”);
- (b) calculate the return of capital based on the useful life of the asset (“Depreciation”);
- (c) aggregate the Required Return and Depreciation to derive the “Required Revenue”;
- (d) derive a GJ.km tariff (“Tariff 1”); and
- (e) apply Tariff 1 across the Maui Pipeline Shippers on the basis of quantity of Gigajoules of Gas transported multiplied by the distance of Gigajoules of Gas transported.

In any given year, in the event that MDL’s total revenues are more or less than its required revenue then Tariff 1 may be adjusted for the following years in a manner that endeavours to reduce pricing volatility for Shippers.

The approach adopted by MDL to recover operating expenditure is to:

- (a) aggregate the Maui Pipeline’s operating costs (“Operational Expenditure”);
- (b) allocate Operational Expenditure across every Gigajoule of Gas delivered from the Maui Pipeline.

In any given year, in the event that MDL’s total Operational Expenditure recovery is more or less than its required recovery then Tariff 2 may be adjusted for the following years in a manner that endeavours to reduce pricing volatility for Shippers.

The effect of these tariff principles is that Tariff 1 is the price component intended to provide for a return on our asset base and investments, while Tariff 2 is the price component intended to cover our operational costs.

## Commerce Act requirements

Pursuant to Part 4 of the Commerce Act 1986, the Commerce Commission made a determination on 28 February 2013 that sets out a Default Price-quality Path (DPP) for Gas Transmission Businesses. MDL is subject to this DPP determination since 1 July 2013, for assessment periods running until 30 September 2017. The DPP determination does not prescribe any pricing methodology. However, it does impose a revenue cap that can limit the prices we may charge.

The DPP sets a cap on Allowable Notional Revenue (ANR) for each assessment period. The ANR cap in each period (after the initial period) is simply the ANR of the previous period adjusted for inflation. In other words, the ANR is fixed for the entire regulatory period until 2017 except for changes in the Consumer Price Index. Using actual quarterly CPI figures up to December 2015, and the prescribed formula in MDL's DPP determination, the ANR (in \$ million) for the pricing year/assessment period from 1 July 2016 to 30 June 2017 is:

$$ANR_{2017} = ANR_{2016} (1 + \Delta CPI) = 42.141 (1 + 0.293\%) = 42.264$$

Compliance with the DPP is based on the concept of Notional Revenues. The general DPP requirement is that Notional Revenues for each assessment period must not exceed the ANR for that period. In other words, MDL's pricing is subject to a cap on Notional Revenues.

Notional Revenues are not the same as actual revenues or expected revenues. The DPP determination requires them to be calculated as:

$$NR_t = \sum_i P_{i,t} Q_{i,t-2} - (K_t + V_t)$$

where:

- t is the year in which the pricing period ends;
- i is each tariff relating to a gas transmission service;
- $P_{i,t}$  is the  $i^{\text{th}}$  tariff for any part of the pricing period;
- $Q_{i,t-2}$  is the quantity for the  $i^{\text{th}}$  tariff during the pricing period ending in year  $t-2$ ;
- $K_t$  is the sum of all Pass-through Costs for the pricing period;
- $V_t$  is the sum of all Recoverable Costs for the pricing period.

This means Notional Revenues are calculated with a 2-year lag between throughput quantities used in the tariff rate calculation and the period over which the new tariffs actually apply. It also means we deduct Pass-through and Recoverable Costs from our notional tariff revenues. In other words we are allowed to increase our notional tariff revenue with those costs.

The tariff quantities  $Q_{i,t-2}$  invoiced by MDL for the July 2014 to June 2015 period were:

18,967,692 TJ.km  
169,344 TJ

Pass-through Costs  $K_t$  applied for the pricing period are \$ 0.660 million. These are for:

- rates on pipeline assets paid or payable to a local authority under the Local Government (Rating) Act 2002; and
- levies payable:
  - under regulations made under section 53ZE of the Commerce Act 1986, for activities of the Commerce Commission;

- under regulations made under the Gas Act 1992, for activities of the Gas Industry Company Limited;
- to the Electricity and Gas Complaints Commissioner Scheme.

Recoverable Costs  $V_t$  applied for the pricing period are \$ -0.790 million; i.e. a negative number representing a net income. This Recoverable Cost is only for balancing gas. Specifically, it represents the net sum of costs and credits arising from purchases and sales of gas for line pack management and for settlement of Welded Point imbalances, to the extent that they have not been recovered from Welded Parties through Peaking Charges and Incentives Pool operations specified in the MPOC.

### Tariff setting approach

We use a two-step approach to setting tariffs for our pricing year starting on 1 July 2016.

- 1 We first calculate required revenues and tariffs following the same methodology, in compliance with Schedule 10 of the MPOC, as was used in recent years; but excluding any adjustments or compensations for prior adjustments. The Notional Revenues calculated from this step are above our Allowable Notional Revenue cap.
- 2 We then make adjustments to Tariff 1 and Tariff 2 until the resulting Notional Revenues are reduced to not exceed our Allowable Notional Revenue cap.

This approach is similar to the approach used last year for setting tariffs from 1 July 2015. For that and for previous periods, however, we calculated proportional adjustments to target revenues for Tariff 1 and Tariff 2 so that they represented the same percentage (excluding taxation effects) of final Target Revenues. We are not using such proportional adjustments from 1 July 2016, because they would lead to a 3.3% increase in Tariff 1 combined with a 13.7% reduction in Tariff 2. In order to avoid such a distortionate result, we have chosen to hold Tariff 1 at the same price, and applied all reductions to Tariff 2 instead.

Last year's step 2 adjustments led to a reduction of \$ 6.187 million to total Target Revenues in comparison to what would have been targeted using the traditional MPOC approach. This year's adjustments lead to a reduction to total Target Revenues of \$ 11.847 million.

### Consistency with pricing principles

The Commerce Commission has determined pricing principles for regulated gas pipeline business. We are not required to comply with those principles. As part of our disclosure, however, we are required to "demonstrate the extent to which the pricing methodology is consistent with the pricing principles and explain the reasons for any inconsistency between the pricing methodology and the pricing principles". Our views on the consistency between MDL's pricing methodology and the pricing principles are set out below.

| pricing principles   | MDL pricing methodology consistency   |
|--|---|
| <p>(1) Prices are to signal the economic costs of service provision, by-</p> <p>(a) being subsidy free, that is, equal to or greater than incremental costs and less than or equal to standalone costs, except where subsidies arise from compliance with legislation and/or other regulation;</p> | <p>Our pricing methodology is not consistent with this principle.</p> <ul style="list-style-type: none"> <li>• We have not considered incremental and standalone costs in setting prices.</li> <li>• Our pricing methodology does not consider nor signal the economic costs of service provision.</li> </ul> |

| pricing principles  | MDL pricing methodology consistency   |
|---|---|
| (b) having regard, to the extent practicable, to the level of available service capacity; and<br><br>(c) signalling, to the extent practicable, the effect of additional usage on future investment costs.  | <ul style="list-style-type: none"> <li>• Our pricing methodology does not consider available capacity.</li> <li>• Our pricing methodology does not consider the effect of additional usage on future investment costs.</li> </ul> |
| (2) Where prices based on 'efficient' incremental costs would under-recover allowed revenues, the shortfall is made up by prices being set in a manner that has regard to consumers' demand responsiveness, to the extent practicable.  | Our pricing methodology is not consistent with this principle. Our pricing is the same for all our consumers and has no regard to demand responsiveness.  |
| (3) Provided that prices satisfy (1) above, prices are responsive to the requirements and circumstances of consumers in order to-<br><br>(a) discourage uneconomic bypass; and<br><br>(b) allow negotiation to better reflect the economic value of services and enable consumers to make price/quality trade-offs or non-standard arrangements for services. | Our pricing methodology does not satisfy principle (1). Even if it did, our prices are the same for all our consumers and cannot provide responses to their individual requirements and circumstances.                            |
| (4) Development of prices is transparent, promotes price stability and certainty for consumers, and changes to prices have regard to the effect on consumers  | We believe development of our prices is transparent and our pricing methodology promotes price stability and certainty for our consumers in the short to medium term.   |

The reason for any inconsistency between our pricing methodology and the Commerce Commission's pricing principles lies in the fact that our methodology is prescribed by the MPOC and revenue is constrained by both the MPOC and regulation.

The MPOC is a set of terms and conditions that was extensively negotiated among all gas industry participants before the start of the open access regime on the Maui pipeline. Any changes to the MPOC, including its pricing methodology, would require prior industry consultation and a positive recommendation from the Gas Industry Co.

## 2. Changes in prices and target revenues

### Step 1 calculations

The initial results for prices and target revenues calculated for our pricing period starting on 1 July 2016 following the approach set out in Schedule 10 of the MPOC (without considering tariff adjustments) are set out in the table below, together with comparable numbers for the 2015-2016 pricing period.

| <b>\$ million per pricing period</b> | <b>Jul 2015 – Jun 2016</b> | <b>Jul 2016 – Jun 2017</b> |
|--------------------------------------|----------------------------|----------------------------|
| <b>Tariff 1</b>                      |                            |                            |
| Pipeline Asset Value                 | 290.858                    | 284.449                    |
| WACC (post-tax)                      | 6.77%                      | 6.77%                      |
| Revaluation Adjustment               | -2.234                     | -0.242                     |
| Required Return                      | 17.457                     | 19.018                     |
| Depreciation                         | 7.571                      | 7.773                      |
| Taxation Adjustment                  | 6.789                      | 7.396                      |
| <b>Tariff 1 Target Revenue</b>       | <b>31.817</b>              | <b>34.188</b>              |
| Throughput Forecast (TJ.km)          | 17,169,560                 | 15,212,429                 |
| Tariff 1 (\$ / GJ.km)                | 0.001853                   | 0.002247                   |
| <b>Tariff 2</b>                      |                            |                            |
| Operational Expenditure Forecast     | 14.784                     | 13.318                     |
| <b>Tariff 2 Target Revenue</b>       | <b>14.784</b>              | <b>13.318</b>              |
| Throughput Forecast (TJ)             | 173,440                    | 161,713                    |
| Tariff 2 (\$ / GJ)                   | 0.085241                   | 0.082355                   |
| <b>Combined</b>                      |                            |                            |
| <b>Total Target Revenue</b>          | <b>46.602</b>              | <b>47.505</b>              |

The inputs in the tariff calculations for the pricing period starting on 1 July 2016 are based on the following information, assumptions and statistics.

- The Pipeline Asset Value, as well as the Revaluation Adjustment and Depreciation for it, are based on values for the Regulatory Asset Base (RAB) as calculated per 31 December 2015 in accordance with the Commerce Commission's Gas Transmission Services Input Methodologies Determination 2012.
- WACC is a post-tax WACC, after a 75<sup>th</sup> percentile adjustment, based on parameters obtained from the Commerce Commission's "Gas Transmission Services Input Methodologies Determination 2012" and "Cost of capital determination for default price-quality paths for suppliers of gas distribution and gas transmission services, and customised price-quality path proposals made by Vector Limited and GasNet Limited" dated 20 December 2012. Both determinations were used to set the DPP for MDL.
- Taxation Adjustment is based on an assumed corporate taxation of 28% on forecast income.
- Operational Expenditure Forecast is derived from a combination of MDL budgets for 2016 with a 2.1% inflation adjustment for the first half of 2017.
- The 2.1% CPI inflation forecast for 2017 is obtained from Table 1 in the Half Year Economic and Fiscal Update published by the Treasury on 15 December 2015.
- Throughput Forecasts are based on independent gas demand forecasts for the period 1 July 2016 to 30 June 2017 prepared for MDL's Commercial Operator by Arête Consulting Limited.

The Notional Revenues (using throughput quantities from 2 years prior to the pricing period, instead of the forecast throughput quantities for the pricing period) that would result from the unadjusted MPOC tariff calculations are set out below.

| <b>\$ million per pricing period</b>    | <b>Jul 2015 – Jun 2016</b> | <b>Jul 2016 – Jun 2017</b> |
|---|----------------------------|----------------------------|
| Unadjusted Notional Revenues            | 48.692                     | 56.697                     |
| Allowable Notional Revenue              | 42.141                     | 42.264                     |
| required reduction / (allowed increase) | 6.551                      | 14.433                     |

## Step 2 results

The reductions made to comply with the DPP Determination, for the 2016-2017 pricing period as well as the preceding period, are set out in the table below.

| <b>\$ million per pricing period</b>                           | <b>Jul 2015 – Jun 2016</b> | <b>Jul 2016 – Jun 2017</b> |
|--|----------------------------|----------------------------|
| <b>Tariff 1</b>  |                            |                            |
| Tariff 1 MPOC Target Revenue                                   | 31.817                     | 34.188                     |
| Tariff 1 Adjustment  | -2.986                     | -6.865                     |
| Taxation Effect  | -1.732                     | -3.317                     |
| Tariff 1 Adjusted Target Revenue                               | 27.099                     | 24.005                     |
| Tariff 1 (\$ / GJ.km)  | 0.001578                   | 0.001578                   |
| relative change from prior year                                | -6.4%                      | N/A                        |
| <b>Tariff 2</b>  |                            |                            |
| Tariff 2 MPOC Target Revenue                                   | 14.784                     | 13.318                     |
| Tariff 2 Adjustment  | -1.468                     | -1.665                     |
| Tariff 2 Adjusted Target Revenue                               | 13.317                     | 11.653                     |
| Tariff 2 (\$ / GJ)   | 0.076779                   | 0.072061                   |
| relative change from prior year                                | +0.9%                      | -6.1%                      |
| <b>Combined</b>  |                            |                            |
| <b>Total Adjusted Target Revenue</b>                           | <b>40.415</b>              | <b>35.658</b>              |
| Adjusted Notional Revenues                                     | 42.141                     | 42.264                     |
| Adjustments (excl. Taxation Effect) / Adjusted Target Revenues | -11.0%                     | -23.9%                     |

The resulting Adjusted Target Revenues (based on forecast throughput quantities), Tariffs, and Adjusted Notional Revenues (based on throughput quantities from 2 years prior) are also included.

## Reasons for changes

The changes in our prices shown in Step 1 above result from changes in the input parameters used to calculate our tariffs. The main reasons for these changes are as follows.

- Inflation over 2015 was only 0.08% as compared to (an already low) 0.76% over 2014. The reduced inflation reduces the Revaluation Adjustment. This leads to an increase in our MPOC Required Return for Tariff 1. By itself, the reduced inflation leads to an increase of \$ 2.532 million.
- The Operational Expenditure forecast for 2016-2017 is \$ 1.466 million lower than for the 2015-2016 pricing period. Tariff 2 Target Revenue reduces accordingly.
- Changes in the Throughput Forecasts. The TJ forecast is 6.8% lower than for the prior pricing period, mainly due to the closing of power stations in Auckland. The TJ.km forecast is 11.4% lower, as a result of the average forecast shipping distance also declining; from 99 km to 94 km. These changes affect the calculation for setting unit tariffs, but do not affect target revenues.

The further changes in Step 2 are made to adjust our tariffs so that the resulting Notional Revenues do not exceed our ANR cap according to the DPP determination.

## Pricing strategy

Our Directors have not made any recorded decisions on MDL's plans or strategy to amend or develop prices in the future. (Other than the change of prices set out in this disclosure, and maintaining general compliance with the MPOC and any applicable regulations.)

### 3. Prices for non-standard contracts

The terms of Transmission Services Agreements are required to be substantively the same for all Shippers on the Maui pipeline. Section 2.1(a) of the MPOC stipulates that: "...every TSA with a Shipper shall include only the terms and conditions of this Operating Code and necessary individual information...". As a result, MDL does not have and cannot offer any non-standard contracts to Shippers.

### 4. Views of consumers

We have not directly sought the views of our consumers in calculating our current prices.

We do expect the views of our consumers are reflected in the MPOC, including its pricing methodology. This was negotiated at the start of the open access regime on the Maui pipeline. Moreover, any party to the MPOC may submit a change request, including a proposal to change the pricing methodology. Any change request would require industry consultation and allow all of our consumers to make submissions and provide their views on proposed changes.

### 5. Disclosure of prices

The current and the new prices for MDL's gas transmission services are:

| Prices                | 1 July 2015 to 30 June 2016 | with effect from 1 July 2016 |
|-----------------------|-----------------------------|------------------------------|
| Tariff 1 (\$ / GJ.km) | 0.001578                    | 0.001578                     |
| Tariff 2 (\$ / GJ)    | 0.076779                    | 0.072061                     |



The procedure for calculating tariffs payable by specific consumers of gas transmission services, i.e. Shippers, is set out in clause 19.1 of the MPOC, as extracted below.

19.1 Each Shipper shall pay to MDL the Throughput Charges being the sum of A + B + C

where

(a) **A** is the **AQ Fee** being:

**Tariff M** x AQ Volume

where

**Tariff M** = Tariff 1 multiplied by the distance between the southern and the northern end of each AQ Zone specified in that Shipper's AQ, less any agreed percentage discount for a long term AQ commitment specified in a TSA provided that the AQ Fee shall be reduced to the extent that an AQ is curtailed on a Day in accordance with section 8 and to the extent that the Shipper trades its AQ in accordance with section 7.7; and

(b) **B** is  $\text{Tariff 1} \times \sum (Q_i - \text{AQ Volume}_i) \times D_i$

where

**Q<sub>i</sub>** is the net quantity of Gas being transported between two adjacent Welded Points for that Shipper according to its Approved Nominations at each of those Welded Points; and

**AQ Volume<sub>i</sub>** is that Shipper's AQ Volume between the two adjacent Welded Points to which the relevant quantity of Gas (Q) relates; and

**D<sub>i</sub>** is the distance between the two adjacent Welded Points to which the relevant quantity of Gas (Q) relates

provided that if  $(Q_i - \text{AQ Volume}_i)$  is less than zero, then  $(Q_i - \text{AQ Volume}_i)$  for that **D<sub>i</sub>** shall equal zero; and

(c) **C** is Tariff 2 multiplied by the sum of that Shipper's Approved Nominations at Physical Delivery Points regardless of distance.

It can be noted that AQ Fees are not in effect at present. Under the current arrangements in the MPOC we have never received a request from any Shipper for a non-zero AQ. This means that AQ Volumes for all of our pricing years to date and for all Shippers have been and are zero.

MDL currently has 12 Shippers to which these prices apply. Tariff 1 and Tariff 2 are the same for all Parties. We do not allocate target revenues among Shippers.

The tariffs may also be used in the calculation of prices for Cash-Out Transactions with Welded Parties as set out in section 12.12 of the MPOC. One of the components of these prices is the Cash-Out Transmission Price, which is defined as:

**"Cash-Out Transmission Price"** means, with respect to a Cash-Out Transaction, an amount that is equal to the cost per GJ that a Shipper with an AQ Volume of zero would have incurred (under section 19.1) for transportation of Gas between the relevant Welded Point and the Payback Point on the relevant Day.

This can apply to 8 Welded Parties (excluding Notional Point Welded Parties). Because Cash-Out Transactions are part of balancing gas recoverable costs (and in a perfect world would not arise) the associated target revenue is zero.

## **6. Certification**

The required certification for this disclosure is attached.

## Certification for Disclosures at the Beginning of a Pricing Year

### Clause 2.9.2

We, Murray Eric Jackson and Paul Anthony Eckford, being directors of Maui Development Limited certify that, having made all reasonable enquiry, to the best of our knowledge-

- a) the following attached information of Maui Development Limited prepared for the purposes of clause 2.4.1 of the Gas Transmission Information Disclosure Determination 2012 in all material respects complies with that determination; and
- b) the prospective financial or non-financial information included in the attached information has been forecast on a basis consistent with regulatory requirements or recognised industry standards.



27 May 2016