

# Wilson Cook & Co

Engineering and Management Consultants  
Advisers and Valuers

Reply to: Auckland Office  
Our ref: 1113  
Email: info@wilsoncook.co.nz

11 October 2011

The Chief Executive  
Vector Ltd  
101 Carlton Gore Road  
NEWMARKET

Attention: Mr Brett Butler, Group Manager, Pricing & Valuation

Dear Sir,

## **RE: ENGINEERING REPORT IN RELATION TO COMMERCE COMMISSION'S ASSET ADJUSTMENT PROCESS (GAS TRANSMISSION)**

In accordance with your instructions of 15 June 2011 in relation to Vector Limited's (Vector's) response to the Commerce Commission's (Commission's) request for information under section 53ZD of the *Commerce Act 1986* issued to Vector on 6 July 2011 (the Notice), relating in turn to the gas transmission default price-quality path determination process presently under way, we report as follows.

### **1 Adjustments**

We understand that the asset adjustments that you propose to make are as follows:

- (a) an adjustment to include the value of land at stations (\$5.07 m);
- (b) an adjustment to include the value of critical spares (\$0.99 m);
- (c) an adjustment to correct asset ages as part of the roll-forward process; and
- (d) an adjustment to include the value of "line pack" and certain intangible assets.

These adjustments, of which items (a) and (b) total \$6.06 m, are further identified, described and explained in the attached table, prepared by you in the form of Schedule C of the Notice.

The table is supported by a report dated October 2011 that was also prepared by you, is referred to in the table and should be read in conjunction with the table.

We note that, as a matter of practicality, neither the table nor its supporting documents contains enough information for a reader to verify the arithmetical accuracy of the asset adjustment calculations as the calculations are made, in the main, in a computerised geographical information system (GIS) or in other such systems operated by your staff. However, we further note that those systems are of a type commonly used by gas pipeline businesses for undertaking analyses and making calculations of the type concerned in relation to the present matter.

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## **2 Opinion**

Having reviewed your material as identified above and after making reasonable enquiries with you, we are satisfied that to the best of our knowledge:

- (a) the adjustments described in (a) and (b) above are of types that comply with the Commission's requirements, as set out in its determination of December 2010 and as summarised in the Notice;
- (b) subject to the qualification in 3 below in relation to land, the data, information, criteria and assumptions employed, as set out in your documentation (but not repeated or paraphrased here for reasons of their length and for clarity), are appropriate and reasonable for the purpose of defining the adjustments; and
- (c) the methods of calculation employed to quantify the adjustments, as set out in your documentation, are appropriate for the purpose.

Based on the foregoing, we consider that this report meets the requirements of Schedule C in respect of the items described in (a) and (b) of section 1 of this letter, subject to the qualifications stated in 3 below.

## **3 Qualifications**

### *Values Determined under Generally Accepted Accounting Practice Not Reviewed by Us*

The derivation of values of a type normally determined in accordance with generally accepted accounting practice is a matter outside our ambit and therefore no such values, if any, have been reviewed by us or are covered by our opinion.

Such matters include the proposed adjustments in relation to line pack, intangible assets and the calculation of depreciation and rolled-forward amounts.

### *Verification of Calculations by Audit Not Reviewed by Us*

The verification of calculations by methods normally considered an audit (or using processes of a type that a qualified auditor would use) is also a matter outside our ambit and therefore no such calculations have been verified by us or are covered by our opinion.

Such calculations include those made in or derived from your GIS system or from other such systems.

### *Verification of Land Values and their Method of Adjustment*

The verification of land values and their method of adjustment back to the year 2003 are matters of a type that may be required to be determined by a Registered Valuer and are thus outside our ambit. Therefore, no such values have been reviewed by us or are covered by our opinion other than in the sense that we support Vector's claim that an adjustment be made to include a reasonable value for parcels of land omitted from the 2003 valuation.

### *No Consideration of Roll-Forward of Valuation*

No consideration has been given by us to the roll-forward of any values from the year 2003.

### *No Determination of Impact of Professional Judgement*

For reasons of practicality, no attempt has been made by us to quantify the impact of the exercise of professional judgement in your calculations, as the exercise of professional judgement is implicit in (and an integral part of) the calculations and the calculations would not be valid without the assumptions so made.

## **4 Qualifications of the Reviewer**

This opinion has been prepared for and on behalf of Wilson Cook & Co Ltd by Mr Jeffrey Wilson, with the assistance of Mr Peter Cole. Mr Wilson believes that both he and Mr Cole meet

the definition of “engineer” in clause 1.1.4 of the *Commerce Act (Gas Transmission Services Input Methodologies) Determination 2010* as both are chartered professional engineers, acting in that professional capacity and independent (defined in turn by the Commission as neither in a relationship with, nor having an interest in, for present purposes, Vector, that is likely to involve him in a conflict of interest between his duties to us and any normal professional duties to the Commission).

Mr Wilson is qualified professionally in engineering and commerce and has over forty years experience as a professional engineering adviser in the energy industry, including more than 20 years of experience in asset valuations, regulatory assessments and related work. Mr Cole is qualified professionally in engineering and has a similar length of experience in mechanical engineering, including in gas engineering and gas reticulation.

No restriction or influence that we considered inappropriate was imposed on us or on the scope of our services by Vector’s management or other circumstances.

## **5 Conditions Accompanying Our Opinion**

### *Disclosure*

Wilson Cook & Co Limited has prepared this report in accordance with the instructions of its client on the basis that all data and information that may affect its conclusions have been made available to it. No responsibility is accepted if full disclosure has not been made. No responsibility is accepted for any consequential error or defect in our conclusions resulting from any error, omission or inaccuracy in the data or information supplied directly or indirectly.

### *Disclaimer*

This report has been prepared solely for our client, Vector, for the purpose stated in the preamble to this report. Wilson Cook & Co Limited, its officers, agents, subcontractors and their staff owe no duty of care and accept no liability to any other party, make no representation or warranty as to the accuracy or completeness of the information or opinions set out in the report to any person other than to its client including any errors or omissions howsoever caused, and do not accept any liability to any party if the report is used for other than its stated purpose.

### *Non-Publication*

With the exception of its publication by Vector in full as part of its response to the Commission, neither the whole nor any part of this report may be included in any published document, circular or statement or published in any way without our prior written approval of the form and context in which it may appear.

Yours faithfully

**Wilson Cook & Co Limited**

A handwritten signature in blue ink that reads "Wilson Cook & Co." with a stylized flourish at the end.

Encl. Letter of Engagement and Table of Adjustments



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15 June 2011

Mr Jeffrey Wilson  
Managing Director  
Wilson Cook & Co Ltd  
PO Box 2296  
Auckland  
New Zealand

Dear Jeffrey

## **ENGINEERING REPORT AND OPINION IN RELATION TO ASSET ADJUSTMENT PROCESS – TERMS OF ENGAGEMENT**

Thank you for agreeing to act as Vector Limited's (Vector) independent engineer for the purpose of our response to the Commerce Commission's request for information under section 53ZD of the Commerce Act 1986, in relation to the Commission's Commerce Act (Gas Distribution Services Input Methodologies) Determination 2010 and Commerce Act (Gas Transmission Services Input Methodologies) Determination 2010.

We are undertaking the asset adjustment process set out in clause 2.2.1 of the above Commerce Acts and are required to provide the Commission with certain expert opinions and supporting information.

### **Terms of Engagement**

Wilson Cook & Co Ltd is engaged by Vector to provide your services to perform, on its behalf, the services set out below until 30 September 2011 or such date as we agree mutually.

You confirm that you meet the definition of "engineer" in clause 1.1.4 of the above Commerce Acts – namely, that you are (a) a Chartered Professional Engineer; (b) acting in that professional capacity; and (c) independent (defined in turn as neither in a relationship with, nor having an interest in, for present purposes, Vector, that is likely to involve you in a conflict of interest between your duties to us and your duties to the Commission).

**The Services**

The services are: (a) the preparation of a report complying with the requirements set out in Schedule C (including Table 1 of that Schedule) of the 2011 Notices to Supply Information; (b) reporting to us on the progress of your work as required; and (c) all other work as required by us from time to time during the engagement.

The commercial terms of your engagement have been agreed previously with us by way of a separate agreement.

**Confidentiality**

You will be required to keep confidential all information and documents that you acquire during this engagement, other than where we specifically authorise you in writing to disclose such information or where you must do so by law.

I look forward to hearing whether these terms are acceptable to you.

Yours faithfully



Brett Butler  
Group Manager Pricing & Valuation

**Appendix A - Summary table of adjustments corresponding to Table 1 of Schedule C: Information requirements for engineer's report**

| Nature of adjustment             | <b>Inclusions for assets omitted in error from the 2009 disclosed assets</b> |                     |
|----------------------------------|--|---------------------|
| Category of adjustment           | Correct asset register errors  |                     |
| GTB IM cl. Ref                   | 2.2.1(2)(c)(i)   |                     |
| Designated asset type            | Included   |                     |
| Description and number of assets | Land   | 1                   |
|                                  | Critical Spares  | 1                   |
| Physical asset life              | Land   | 0 (not depreciated) |
|                                  | Critical Spares  | 0 (not depreciated) |
| Supporting information           | Section 2 of report  |                     |
| 2003 ODV original (\$000)        | Land   | 0                   |
|                                  | Critical Spares  | 0                   |
|                                  | Total  | 0                   |
| 2003 ODV adjusted (\$000)        | Land   | 5,073               |
|                                  | Critical Spares  | 991                 |
|                                  | Total  | 6,064               |
| Value of adjustment (\$000)      | Land   | 5,073               |
|                                  | Critical Spares  | 991                 |
|                                  | Total  | 6,064               |

| Nature of adjustment                                | <b>Inclusions for assets omitted in error from the 2009 disclosed assets</b> |                     |
|---|--|---------------------|
| Category of adjustment                              | Correct asset register errors  |                     |
| GTB IM cl. Ref                                      | 2.2.1(2)(c)(i)   |                     |
| Designated asset type                               | Included   |                     |
| Description and number of assets                    | Linepack   | 1                   |
| Physical asset life                                 | Linepack   | 0 (not depreciated) |
| Supporting information                              | Section 2 of report  |                     |
| 2007 Disclosure year addition (\$000)               | Linepack   | 1,429               |
| Value of adjustment in 2007 disclosure year (\$000) | Linepack   | 1,429               |

| Nature of adjustment                                | <b>Inclusions for assets omitted in error from the 2009 disclosed assets</b> |        |
|---|--|--------|
| Category of adjustment                              | Correct asset register errors  |        |
| GTB IM cl. Ref                                      | 2.2.1(2)(c)(i)   |        |
| Designated asset type                               | Included   |        |
| Description and number of assets                    | Intangible Assets (excluding goodwill): 1 asset                              |        |
| Physical asset life                                 | Intangible Assets  | 38     |
| Supporting information                              | Section 5 of report  |        |
| 2005 Disclosure year addition (\$000)               | Intangible Assets  | 10,413 |
| Value of adjustment in 2005 disclosure year (\$000) | Intangible Assets  | 10,413 |

| Nature of adjustment             | <b>Adjustment to correct asset age</b> |         |
|----------------------------------|--|---------|
| Category of adjustment           | Correct asset register errors          |         |
| GTB IM cl. Ref                   | 2.2.1(2)(c)(iii)                       |         |
| Designated asset type            | Value modified                         |         |
| Description and number of assets | Easements - Gas                        | 195     |
|                                  | Gas Transmission Pipelines             | 196     |
|                                  | Gas Transmission Stations              | 232     |
|                                  | Gas Transmission Compressors           | 8       |
| Supporting information           | Section 3 of report                    |         |
| 2003 ODV original (\$000)        | Easements - Gas                        | 36,181  |
|                                  | Gas Transmission Pipelines             | 344,671 |
|                                  | Gas Transmission Stations              | 34,658  |
|                                  | Gas Transmission Compressors           | 27,542  |
|                                  | Total                                  | 443,052 |

| Nature of adjustment             | <b>Adjustment to correct asset age</b> |       |
|----------------------------------|--|-------|
| Category of adjustment           | Correct asset register errors          |       |
| GTB IM cl. Ref                   | 2.2.1(2)(c)(iii)                       |       |
| Designated asset type            | Value modified                         |       |
| Description and number of assets | Gas Meters                             | 2     |
|                                  | Gas Transmission Pipelines             | 3     |
|                                  | Gas Transmission Stations              | 26    |
|                                  | Gas Transmission Compressors           | 2     |
| Supporting information           | Section 3 of report                    |       |
| 2004 value (\$000)               | Gas Meters                             | 32    |
|                                  | Gas Transmission Pipelines             | 1,015 |
|                                  | Gas Transmission Stations              | 287   |
|                                  | Gas Transmission Compressors           | 35    |
|                                  | Total                                  | 1,369 |

| Nature of adjustment             | <b>Adjustment to correct asset age</b>   |       |
|----------------------------------|--|-------|
| Category of adjustment           | Correct asset register errors            |       |
| GTB IM cl. Ref                   | 2.2.1(2)(c)(iii)                         |       |
| Designated asset type            | Value modified                           |       |
| Description and number of assets | Gas Transmission Pipelines               | 9     |
|                                  | Gas Transmission Stations                | 67    |
|                                  | Gas Transmission Compressors             | 9     |
|                                  | Gas Transmission SCADA & Control Systems | 3     |
| Supporting information           | Section 3 of report                      |       |
| 2005 value (\$000)               | Gas Transmission Pipelines               | 868   |
|                                  | Gas Transmission Stations                | 4,369 |
|                                  | Gas Transmission Compressors             | 398   |
|                                  | Gas Transmission SCADA & Control Systems | 157   |
|                                  | Total                                    | 5,792 |

| Nature of adjustment             | <b>Adjustment to correct asset age</b>   |       |
|----------------------------------|--|-------|
| Category of adjustment           | Correct asset register errors            |       |
| GTB IM cl. Ref                   | 2.2.1(2)(c)(iii)                         |       |
| Designated asset type            | Value modified                           |       |
| Description and number of assets | Gas Transmission Pipelines               | 12    |
|                                  | Gas Transmission Stations                | 51    |
|                                  | Gas Transmission Compressors             | 20    |
|                                  | Gas Transmission SCADA & Control Systems | 3     |
| Supporting information           | Section 3 of report                      |       |
| 2006 value (\$000)               | Gas Transmission Pipelines               | 812   |
|                                  | Gas Transmission Stations                | 819   |
|                                  | Gas Transmission Compressors             | 879   |
|                                  | Gas Transmission SCADA & Control Systems | 809   |
|                                  | Total                                    | 3,318 |

| Nature of adjustment             | <b>Adjustment to correct asset age</b>   |       |
|----------------------------------|--|-------|
| Category of adjustment           | Correct asset register errors            |       |
| GTB IM cl. Ref                   | 2.2.1(2)(c)(iii)                         |       |
| Designated asset type            | Value modified                           |       |
| Description and number of assets | Gas Transmission Pipelines               | 9     |
|                                  | Gas Transmission Stations                | 28    |
|                                  | Gas Transmission Compressors             | 15    |
|                                  | Gas Transmission SCADA & Control Systems | 2     |
| Supporting information           | Section 3 of report                      |       |
| 2007 value (\$000)               | Gas Transmission Pipelines               | 5,591 |
|                                  | Gas Transmission Stations                | 1,238 |
|                                  | Gas Transmission Compressors             | 1,774 |
|                                  | Gas Transmission SCADA & Control Systems | 603   |
|                                  | Total                                    | 9,207 |

| Nature of adjustment             | <b>Adjustment to correct asset age</b>   |       |
|----------------------------------|--|-------|
| Category of adjustment           | Correct asset register errors            |       |
| GTB IM cl. Ref                   | 2.2.1(2)(c)(iii)                         |       |
| Designated asset type            | Value modified                           |       |
| Description and number of assets | Gas Transmission Pipelines               | 3     |
|                                  | Gas Transmission Stations                | 56    |
|                                  | Gas Transmission Compressors             | 7     |
|                                  | Gas Transmission SCADA & Control Systems | 1     |
| Supporting information           | Section 3 of report                      |       |
| 2008 value (\$000)               | Gas Transmission Pipelines               | 1,676 |
|                                  | Gas Transmission Stations                | 1,784 |
|                                  | Gas Transmission Compressors             | 1,443 |
|                                  | Gas Transmission SCADA & Control Systems | 163   |
|                                  | Total                                    | 5,066 |



| Nature of adjustment             | <b>Adjustment to correct asset age</b>   |       |
|----------------------------------|--|-------|
| Category of adjustment           | Correct asset register errors            |       |
| GTB IM cl. Ref                   | 2.2.1(2)(c)(iii)                         |       |
| Designated asset type            | Value modified                           |       |
| Description and number of assets | Gas Transmission Pipelines               | 3     |
|                                  | Gas Transmission Stations                | 6     |
|                                  | Gas Transmission Compressors             | 2     |
|                                  | Gas Transmission SCADA & Control Systems | 2     |
|                                  | Gas Transmission Stores & Spares         | 1     |
| Supporting information           | Section 3 of report                      |       |
| 2009 value (\$000)               | Gas Transmission Pipelines               | 1,700 |
|                                  | Gas Transmission Stations                | 1,860 |
|                                  | Gas Transmission Compressors             | 1,279 |
|                                  | Gas Transmission SCADA & Control Systems | 375   |
|                                  | Gas Transmission Stores & Spares         | 456   |
|                                  | Total                                    | 5,670 |



**ADJUSTMENTS TO  
GAS TRANSMISSION NETWORK OPTIMISED  
DEPRIVAL VALUATION  
(as at 30<sup>th</sup> June 2003)**

**October 2011**

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## 1. Introduction

The Commerce Commission's (the Commission's) Input Methodologies Determination of 2010<sup>1</sup> (2010 IM) requires gas transmission networks such as Vector to produce an initial regulatory asset base (RAB) as of 30 June 2009.

For the gas transmission network owned by Vector the 2010 IM prescribes the initial RAB as the value of assets included in the 'Non-Current Assets' category in the 2009 disclosure financial statements ("2009 disclosure value"). A number of adjustments are permitted (2010 IM section 2.2.1(2)(a)-(c)):

- (a) Indexing of the value of assets to allow for changes in the consumer price index between 1 July 2005 and 30 June 2009.
- (b) The inclusion of assets omitted from the 2009 disclosed assets in error ('included' type).
- (c) The exclusion of assets included in the 2009 disclosed assets in error ('excluded' type).
- (d) Correction of errors resulting from assets being allocated to the incorrect asset category, or given an estimation of quantity, age, category or location now known to be incorrect ('value modified' type).

The 2010 IM requires that the valuation methodology used for any adjustments is the valuation methodology that was in use as at the later of the asset commissioning date or the date that the fixed assets were most recently revalued. The most recent revaluation of the gas transmission business was the NGC ODV valuation produced as at 30 June 2003<sup>2</sup> ("the 2003 NGC valuation"). The 2003 NGC valuation is also the value on which the 2009 disclosure financial statements for gas transmission were based, after *inter alia* adjustments each year for additions, disposals and depreciation.

Vector has outlined a number of shortcomings of the 2003 NGC valuation to the Commission in previous submissions<sup>3</sup>. In order to address the shortcomings of the 2003 NGC valuation, Vector produced a robust internal valuation of the gas transmission network in 2008<sup>4</sup>. This followed generally accepted ODV methodologies, and used the Valuation of the Opening Regulatory Asset Base Valuation Methodology (15 February 2007), created by the Commission for its authorisation of Vector's Auckland gas distribution network for the Gas Final Authorisation of 2005 as a guide. The 2008 internal valuation was signed off by PricewaterhouseCoopers with engineering input from Beca Valuations Limited.

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<sup>1</sup> Commerce Act (Gas Distribution Services Input Methodologies) Determination 2010 – 22 December 2010

<sup>2</sup> "ODV 2003 Optimised Deprival Valuation Transmission Distribution as at 30 June 2003", Disclosed NGC report

<sup>3</sup> <http://comcom.govt.nz/assets/Pan-Industry/Input-Methodologies/Draft-Reasons-Papers/Draft-Reasons-EDBs/AssetValuationSub/Vector-Attachment-Submission-on-EDBs-and-GPBs-Input-Methodologies-Asset-Valuation-Duncan-Ian-Head-Statement-Public-23-August-2010.pdf>

<sup>4</sup> Vector Limited "Optimised Deprival Valuation for the Gas Transmission Network As at 30 June 2008", Undisclosed Internal Vector Report

Some treatments in the 2003 NGC valuation, for example special features, do not allow for the use of the 2003 valuation methodology when using the 2008 asset register. However, the 2003 NGC valuation contained sufficient granularity in order for Vector to use that asset register as the basis for the initial RAB and only include adjustments for the inclusion of a number of assets omitted from the 2009 disclosure value assets in error.

## 2. Adjustments

Vector has made the following adjustments for assets which were excluded from the 2003 NGC valuation in error:

- Land at stations
- Critical Spares
- Linepack

### Land at stations

The value of land at stations was not included in the 2003 NGC valuation. Land on which network stations are built is allowed to be included in a network fixed asset valuation<sup>5</sup>. Network station land is also included in the Commerce's Commission's valuation methodology for the Vector and Powerco controlled networks, published in 2007.

Accordingly land assets are included as an adjustment in the initial RAB under the 2010 IM section 2.2.1(2)(c)(i): assets omitted from the 2009 disclosed assets in error. These assets will be classified as "included" assets.

The value of land at stations has been based on government valuations, and adjusted for CPI to arrive at values as at 30/06/2003. This complies with the relevant 2010 IM section 2.2.1(6). The CPI adjusted value for land at stations as at 30 June 2003 is \$5,072,797.

### Critical Spares

The value of critical spares was not included in the 2003 valuation as allowed for under general ODV methodologies<sup>6,7</sup>.

It is not possible to establish the exact list of spares that were held in 2003 due to the length of time that has elapsed and changes in staff and systems over that time. The level of critical spares held by Vector in 2007, acting as a reasonable and prudent

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<sup>5</sup> Handbook for Optimised Deprival Valuation of System Fixed Assets of Electricity Lines Businesses, Commerce Commission, 30 August 2004, pages 8, 31

<sup>6</sup> Handbook for Optimised Deprival Valuation of System Fixed Assets of Electricity Lines Businesses, Commerce Commission, 30 August 2004, page 11 paragraph 2.6

<sup>7</sup> Commerce Commission "Authorisation for the Supply of Natural Gas Distribution Services by Powerco and Vector, Valuation of the Opening Regulatory Asset Base, Valuation Methodology", 15 February 2007, page 9

operator, has been deemed to be the same level of spares that would have been held in 2003 by an asset owner operating on the same basis.

The list and value of critical spares that would be held by a prudent operator was determined at June 2007 as part of the 2008 internal valuation. A summary of the list of critical spares is as follows:

| <b>Type</b>                       | <b>2007 Cost (\$)</b> |
|-----------------------------------|-----------------------|
| Transmission operational spares   | 437,518               |
| Compressor spares                 | 863,944               |
| Overhaul kit for Rotowaro turbine | -155,330              |
| Minor consumables                 | -46,000               |
| <b>Total</b>                      | <b>1,100,132</b>      |

Note that the list of critical spares excludes minor consumables and excludes one of the two overhaul kits held for the Rotowaro compressor as only one was viewed in 2007 as being critical for emergency purposes.

Critical spares are included as a single record in the initial RAB as an adjustment under the 2010 IM section 2.2.1(2)(c)(i): assets omitted from the 2009 disclosed assets in error. The asset will be classified as an "included" asset.

To determine a 2003 value of critical spares, the 2007 valuation was divided by a "de-indexing" factor, using the same method specified by the 2010 IM for indexing asset values, being the weighted average of the sum of the four quarterly CPI indices as applied in the Gas Control Model for the Auckland gas distribution network.

The de-indexed adjusted value for critical spares as at 30 June 2003 is \$991,107.

### Linepack

The value of linepack was not included in the 2009 disclosed assets. Linepack is the volume of residual gas contained within the pipeline system, necessary in order to maintain pressure in the network, and therefore required for the operation of the network.

Linepack is included as an adjustment in the initial RAB under the 2010 IM section 2.2.1(2)(c)(i): assets omitted from the 2009 disclosed assets in error, and will be added into the initial RAB as an included asset in the 2007 disclosure year. The value of Linepack has been established in accordance with NZ IAS 16 and has been reviewed by a qualified accountant.

## **3. Adjustment to correct asset ages**

As part of the asset register roll forward process Vector has identified for the gas transmission system, that asset ages, and the way these were applied to assets in order to roll forward the original asset valuation under the Gas (Information Disclosure) Regulations 1997, do not correspond with the asset ages and their application to assets

in the more detailed asset register.

Vector has elected to correct this error as allowed under the IM clause 2.2.1(2)(c)(iii) where "assets ... [have been] given an estimation of ... age ... now known to be incorrect ...". All assets in the asset register apart from land, critical spares, linepack and intangible assets are affected by this error and are therefore classified as "value modified" under IM clause 2.2.1(1). The corrected depreciation calculations from 2003 to 2009 are now calculated on an individual asset basis, considering each asset's correct commissioning date and remaining life.

The age corrections do not affect the value of assets in the year they enter the RAB asset register. The correction only affects depreciation values in subsequent years. This adjustment is not required in Schedule A4 but is included in an amended table (Appendix A) which complies with the requirements set out in Table 1, Schedule C of the Notice issued on 6 July 2011.

## 4. Adjustment Summary

The following table shows the reconciliation between the original 2003 NGC valuation and the revised valuation based on the adjustments allowed under the 2010 IM.

| <b>Category</b>  | <b>Original ODV (\$)</b> | <b>Adjusted ODV (\$)</b> | <b>Δ ODV (\$)</b> |
|------------------|--------------------------|--------------------------|-------------------|
| Pipeline         | 284,726,035              | 284,726,035              | 0                 |
| Special Features | 59,945,235               | 59,945,235               | 0                 |
| Compressor       | 27,541,960               | 27,541,960               | 0                 |
| Delivery Point   | 26,516,870               | 26,516,870               | 0                 |
| Station          | 8,140,951                | 8,140,951                | 0                 |
| Easement         | 36,180,564               | 36,180,564               | 0                 |
| Land             | Excluded in error        | 5,072,797                | 5,072,797         |
| Critical Spares  | Excluded in error        | 991,107                  | 991,107           |
| <b>Totals</b>    | <b>443,051,615</b>       | <b>449,115,519</b>       | <b>6,063,904</b>  |

Linepack of \$1,429,018 will be added to the adjusted ODV as an included asset in the 2007 disclosure year.

## 5. Inclusion of Intangible Assets

Vector elected to include a value of \$10,412,745 for intangible assets (excluding goodwill) as allowed under the 2010 IM clause 2.2.1(2)(c)(i) for assets omitted in error. This asset is treated as an "included" type and has been included in 2005.

The value has been established in accordance with NZ IAS 38 paragraph 24 (as specified in 4.1.8 of the Input Methodologies (Electricity Distribution and Gas Pipeline Services) Reasons Paper December 2010 and has been reviewed by a qualified accountant.

Wilson Cook & Co. Limited, as Independent Engineer, has not reviewed this inclusion.

**Appendix A - Summary table of adjustments corresponding to Table 1 of Schedule C: Information requirements for engineer's report**

| Nature of adjustment             | <b>Inclusions for assets omitted in error from the 2009 disclosed assets</b> |                     |
|----------------------------------|--|---------------------|
| Category of adjustment           | Correct asset register errors  |                     |
| GTB IM cl. Ref                   | 2.2.1(2)(c)(i)   |                     |
| Designated asset type            | Included   |                     |
| Description and number of assets | Land   | 1                   |
|                                  | Critical Spares  | 1                   |
| Physical asset life              | Land   | 0 (not depreciated) |
|                                  | Critical Spares  | 0 (not depreciated) |
| Supporting information           | Section 2 of report  |                     |
| 2003 ODV original (\$000)        | Land   | 0                   |
|                                  | Critical Spares  | 0                   |
|                                  | Total  | 0                   |
| 2003 ODV adjusted (\$000)        | Land   | 5,073               |
|                                  | Critical Spares  | 991                 |
|                                  | Total  | 6,064               |
| Value of adjustment (\$000)      | Land   | 5,073               |
|                                  | Critical Spares  | 991                 |
|                                  | Total  | 6,064               |

| Nature of adjustment                                | <b>Inclusions for assets omitted in error from the 2009 disclosed assets</b> |                     |
|---|--|---------------------|
| Category of adjustment                              | Correct asset register errors  |                     |
| GTB IM cl. Ref                                      | 2.2.1(2)(c)(i)   |                     |
| Designated asset type                               | Included   |                     |
| Description and number of assets                    | Linepack   | 1                   |
| Physical asset life                                 | Linepack   | 0 (not depreciated) |
| Supporting information                              | Section 2 of report  |                     |
| 2007 Disclosure year addition (\$000)               | Linepack   | 1,429               |
| Value of adjustment in 2007 disclosure year (\$000) | Linepack   | 1,429               |

| Nature of adjustment                                | <b>Inclusions for assets omitted in error from the 2009 disclosed assets</b> |        |
|---|--|--------|
| Category of adjustment                              | Correct asset register errors  |        |
| GTB IM cl. Ref                                      | 2.2.1(2)(c)(i)   |        |
| Designated asset type                               | Included   |        |
| Description and number of assets                    | Intangible Assets (excluding goodwill): 1 asset                              |        |
| Physical asset life                                 | Intangible Assets  | 38     |
| Supporting information                              | Section 5 of report  |        |
| 2005 Disclosure year addition (\$000)               | Intangible Assets  | 10,413 |
| Value of adjustment in 2005 disclosure year (\$000) | Intangible Assets  | 10,413 |



| Nature of adjustment             | <b>Adjustment to correct asset age</b> |         |
|----------------------------------|--|---------|
| Category of adjustment           | Correct asset register errors          |         |
| GTB IM cl. Ref                   | 2.2.1(2)(c)(iii)                       |         |
| Designated asset type            | Value modified                         |         |
| Description and number of assets | Easements - Gas                        | 195     |
|                                  | Gas Transmission Pipelines             | 196     |
|                                  | Gas Transmission Stations              | 232     |
|                                  | Gas Transmission Compressors           | 8       |
| Supporting information           | Section 3 of report                    |         |
| 2003 ODV original (\$000)        | Easements - Gas                        | 36,181  |
|                                  | Gas Transmission Pipelines             | 344,671 |
|                                  | Gas Transmission Stations              | 34,658  |
|                                  | Gas Transmission Compressors           | 27,542  |
|                                  | Total                                  | 443,052 |

| Nature of adjustment             | <b>Adjustment to correct asset age</b> |       |
|----------------------------------|--|-------|
| Category of adjustment           | Correct asset register errors          |       |
| GTB IM cl. Ref                   | 2.2.1(2)(c)(iii)                       |       |
| Designated asset type            | Value modified                         |       |
| Description and number of assets | Gas Meters                             | 2     |
|                                  | Gas Transmission Pipelines             | 3     |
|                                  | Gas Transmission Stations              | 26    |
|                                  | Gas Transmission Compressors           | 2     |
| Supporting information           | Section 3 of report                    |       |
| 2004 value (\$000)               | Gas Meters                             | 32    |
|                                  | Gas Transmission Pipelines             | 1,015 |
|                                  | Gas Transmission Stations              | 287   |
|                                  | Gas Transmission Compressors           | 35    |
|                                  | Total                                  | 1,369 |

| Nature of adjustment             | <b>Adjustment to correct asset age</b>   |       |
|----------------------------------|--|-------|
| Category of adjustment           | Correct asset register errors            |       |
| GTB IM cl. Ref                   | 2.2.1(2)(c)(iii)                         |       |
| Designated asset type            | Value modified                           |       |
| Description and number of assets | Gas Transmission Pipelines               | 9     |
|                                  | Gas Transmission Stations                | 67    |
|                                  | Gas Transmission Compressors             | 9     |
|                                  | Gas Transmission SCADA & Control Systems | 3     |
| Supporting information           | Section 3 of report                      |       |
| 2005 value (\$000)               | Gas Transmission Pipelines               | 868   |
|                                  | Gas Transmission Stations                | 4,369 |
|                                  | Gas Transmission Compressors             | 398   |
|                                  | Gas Transmission SCADA & Control Systems | 157   |
|                                  | Total                                    | 5,792 |

| Nature of adjustment             | <b>Adjustment to correct asset age</b>   |       |
|----------------------------------|--|-------|
| Category of adjustment           | Correct asset register errors            |       |
| GTB IM cl. Ref                   | 2.2.1(2)(c)(iii)                         |       |
| Designated asset type            | Value modified                           |       |
| Description and number of assets | Gas Transmission Pipelines               | 12    |
|                                  | Gas Transmission Stations                | 51    |
|                                  | Gas Transmission Compressors             | 20    |
|                                  | Gas Transmission SCADA & Control Systems | 3     |
| Supporting information           | Section 3 of report                      |       |
| 2006 value (\$000)               | Gas Transmission Pipelines               | 812   |
|                                  | Gas Transmission Stations                | 819   |
|                                  | Gas Transmission Compressors             | 879   |
|                                  | Gas Transmission SCADA & Control Systems | 809   |
|                                  | Total                                    | 3,318 |

| Nature of adjustment             | <b>Adjustment to correct asset age</b>   |       |
|----------------------------------|--|-------|
| Category of adjustment           | Correct asset register errors            |       |
| GTB IM cl. Ref                   | 2.2.1(2)(c)(iii)                         |       |
| Designated asset type            | Value modified                           |       |
| Description and number of assets | Gas Transmission Pipelines               | 9     |
|                                  | Gas Transmission Stations                | 28    |
|                                  | Gas Transmission Compressors             | 15    |
|                                  | Gas Transmission SCADA & Control Systems | 2     |
| Supporting information           | Section 3 of report                      |       |
| 2007 value (\$000)               | Gas Transmission Pipelines               | 5,591 |
|                                  | Gas Transmission Stations                | 1,238 |
|                                  | Gas Transmission Compressors             | 1,774 |
|                                  | Gas Transmission SCADA & Control Systems | 603   |
|                                  | Total                                    | 9,207 |

| Nature of adjustment             | <b>Adjustment to correct asset age</b>   |       |
|----------------------------------|--|-------|
| Category of adjustment           | Correct asset register errors            |       |
| GTB IM cl. Ref                   | 2.2.1(2)(c)(iii)                         |       |
| Designated asset type            | Value modified                           |       |
| Description and number of assets | Gas Transmission Pipelines               | 3     |
|                                  | Gas Transmission Stations                | 56    |
|                                  | Gas Transmission Compressors             | 7     |
|                                  | Gas Transmission SCADA & Control Systems | 1     |
| Supporting information           | Section 3 of report                      |       |
| 2008 value (\$000)               | Gas Transmission Pipelines               | 1,676 |
|                                  | Gas Transmission Stations                | 1,784 |
|                                  | Gas Transmission Compressors             | 1,443 |
|                                  | Gas Transmission SCADA & Control Systems | 163   |
|                                  | Total                                    | 5,066 |

| Nature of adjustment             | <b>Adjustment to correct asset age</b>   |              |
|----------------------------------|--|--------------|
| Category of adjustment           | Correct asset register errors            |              |
| GTB IM cl. Ref                   | 2.2.1(2)(c)(iii)                         |              |
| Designated asset type            | Value modified                           |              |
| Description and number of assets | Gas Transmission Pipelines               | 3            |
|                                  | Gas Transmission Stations                | 6            |
|                                  | Gas Transmission Compressors             | 2            |
|                                  | Gas Transmission SCADA & Control Systems | 2            |
|                                  | Gas Transmission Stores & Spares         | 1            |
| Supporting information           | Section 3 of report                      |              |
| 2009 value (\$000)               | Gas Transmission Pipelines               | 1,700        |
|                                  | Gas Transmission Stations                | 1,860        |
|                                  | Gas Transmission Compressors             | 1,279        |
|                                  | Gas Transmission SCADA & Control Systems | 375          |
|                                  | Gas Transmission Stores & Spares         | 456          |
|                                  | <b>Total</b>                             | <b>5,670</b> |

**Appendix B - Schedule A4 of the Information Disclosure Notice**

|     |   | Gas Transmission Business<br>30 June 2010 |         |         |         |         |         |         |             |  |  |
|-----|---|---|---------|---------|---------|---------|---------|---------|-------------|--|--|
|     |   | GTB Name<br>Disclosure Year Ended         |         |         |         |         |         |         |             |  |  |
| ROW |   | 2003 *                                    | 2004 *  | 2005    | 2006    | 2007    | 2008    | 2009    | Ref         |  |  |
|     |   | (\$000)                                   | (\$000) | (\$000) | (\$000) | (\$000) | (\$000) | (\$000) |             |  |  |
| 6   | Summary of Engineer's Valuation Adjustments (at time asset enters regulatory asset register)            |   |         |         |         |         |         |         | 2.2.1(2)(b) |  |  |
| 7   | Show only the incremental amount of the valuation adjustment  |   |         |         |         |         |         |         |             |  |  |
| 8   | Asset adjustment process - adjustments  |   |         |         |         |         |         |         |             |  |  |
| 9   | Include assets used to supply gas transmission services   |   |         |         |         |         |         |         |             |  |  |
| 10  | Correct asset register errors   |   |         |         |         |         |         |         |             |  |  |
| 11  |   |   |         |         |         |         |         |         |             |  |  |
| 12  | Land  | 5,073                                     |         |         |         |         |         |         |             |  |  |
| 13  | Critical Spares   | 991                                       |         |         |         |         |         |         |             |  |  |
| 14  | Linepack  |   |         | 10,413  |         | 1,429   |         |         |             |  |  |
| 15  | Intangible Assets (excluding goodwill)  |   |         |         |         |         |         |         |             |  |  |
| 16  |   |   |         |         |         |         |         |         |             |  |  |
| 17  |   |   |         |         |         |         |         |         |             |  |  |
| 18  |   |   |         |         |         |         |         |         |             |  |  |
| 19  |   |   |         |         |         |         |         |         |             |  |  |
| 20  |   |   |         |         |         |         |         |         |             |  |  |
| 21  |   |   |         |         |         |         |         |         |             |  |  |
| 22  |   | 6,064                                     |         | 10,413  |         | 1,429   |         |         | 2.2.1(2)(c) |  |  |
| 23  |   |   |         |         |         |         |         |         |             |  |  |
| 24  | Total value of adjustments by disclosure year   | 6,064                                     |         | 10,413  |         | 1,429   |         |         |             |  |  |
| 25  | * Includes assets which first entered the regulatory asset register in a disclosure year prior to 2004. |   |         |         |         |         |         |         |             |  |  |
| 26  |   |   |         |         |         |         |         |         |             |  |  |



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Pieter Nel  
Director  
Nel Consulting Limited  
Auckland

17 July 2012

Dear Mr Nel

**RE: ASSET ADJUSTMENT QUERIES – GAS TRANSMISSION**

In accordance with your email of 26 June 2012, Vector's report "Supplementary Information Required by the Commerce Commission on Adjustments to Gas Transmission Network Optimised Deprival Valuation (as at 30th June 2003)" dated July 2012 is attached providing responses to the queries you raised. This report should be read in conjunction with and supplementary to the October 2011 report referred to in your email.

We have engaged with Wilson Cook & Co, who acted as an Independent Engineer in relation to the October 2011 report, in order to provide the supplementary information. Attached is a letter from Wilson Cook & Co that acknowledges they have seen the July 2012 report and that the submission of that information does not require them to modify their letter dated 11 October 2011 titled, 'Re: engineering report in relation to Commerce Commission's asset adjustment process (Gas Transmission)''.

If you would like to discuss this matter further please contact Brett Butler, Group Manager Pricing & Valuation on 09 978 8286 or at [brett.butler@vector.co.nz](mailto:brett.butler@vector.co.nz).

Yours sincerely

A handwritten signature in blue ink, appearing to read "Allan Carvell".

**Allan Carvell**  
Group General Manager Regulation & Pricing

# Wilson Cook & Co

Engineering and Management Consultants  
Advisers and Valuers

Reply to: Auckland Office  
Our ref: 1212  
Email: info@wilsoncook.co.nz

17 July 2012

The Chief Executive  
Vector Ltd  
101 Carlton Gore Road  
NEWMARKET

BY EMAIL

Attention: Mr Brett Butler, Group Manager, Pricing & Valuation

Dear Sir,

***RE: SUBMISSION BY VECTOR OF SUPPLEMENTARY INFORMATION IN  
RELATION TO COMMERCE COMMISSION'S ASSET ADJUSTMENT  
PROCESS FOR GAS TRANSMISSION***

We refer to your request in relation to your gas transmission asset adjustment process for a letter that, if considered appropriate, “notes that [Wilson Cook & Co is] aware of additional information being provided by Vector [in relation to the value of various assets associated with Vector’s gas transmission network] and confirms that [Vector’s] submission of that information does not require [us] to modify [our letter dated 11 October 2011 titled, ‘*Re: engineering report in relation to Commerce Commission’s asset adjustment process (gas transmission)*’]”.

The additional information referred to is set out in Vector’s document, ‘*Supplementary information required by the Commerce Commission on adjustments to gas transmission network optimised deprivation valuation (as at 30th June 2003), July 2012*’. It comprises information under the following headings: Land at Stations, “Line Pack”, the Correction of Asset Ages, Intangible Assets, and Tests for Asset Quantities and Asset Life.

*No Change in Our Letter of 11 October 2011*

After making enquiries with you, we are satisfied on reasonable grounds that:

- (a) the adjustments discussed in your additional information are unaltered from those expressed in the original report prepared by you in October 2011 and discussed in our letter of 11 October 2011 insofar as they relate to the particular asset classes and methodologies on which we expressed an opinion in that letter;
- (b) the further explanations given in your additional information are consistent with the facts as we know them insofar as they relate to the particular asset classes and methodologies on which we expressed an opinion in that letter; and therefore

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- (c) that letter – viz. our letter of 11 October 2011 – remains applicable in all respects including (but not limited to) the opinions, qualifications, conditions, exclusions and other statements expressed in it.

***Additional Certifying Parties***

In relation to this matter, we again recommend that you draw to the Commission’s attention a statement made by Mr Pieter Nel, the Commission’s consultant, in his email to Vector of 22 June 2012, reading,

*It is recognised that specific asset adjustments, as in the case of intangible assets, are more appropriately reviewed by a qualified party (or party other than the Independent Engineer).*

We agree with that view and thus consider that Mr Nel was wrong to have continued in his email, stating (in relation to electricity assets but implicitly in relation to gas assets as well),

*However, as per the Commission’s Information Request (“Notice To Supply Information to the Commerce Commission – Section 53ZD of the Commerce Act 1986”), should an EDB elect to undertake an asset adjustment process, a written engineer’s report complying with the requirements specified in Schedule C must be provided. It is for this reason that a signed statement from Wilson Cook & Co (we note that you have engaged Wilson Cook & Co as your independent engineer) which at a minimum should state that where values under Generally Accepted Accounting Practice have been relied on (for this instance, for the proposed inclusion of intangible assets), the values have been supplied or reviewed by an appropriately qualified party (typically identifying the qualified party/accountant, type and date of review performed, supporting documentation which provides a breakdown of the proposed adjustment with a description of each to improve the ability of the reader of the Independent Engineer’s report to better understand the proposed adjustment), and that based on this, the corresponding values in relation to the proposed asset value adjustment for intangible assets meets the requirements of Schedule C.*

No matter ought to be certified by a chartered professional engineer (or any other type of engineer, for that matter) unless it is an engineering matter within the certifier’s field of competence. Valuations of land, values determined from financial records (e.g. in relation to intangible assets or to “line pack” in which price and volume are the ruling elements), calculations related to the rolling-forward of the valuation (arising in the present instance from the correction of asset ages) and audit functions of all types (including any work that involves processes of a type that a qualified auditor would use) are clearly instances that ought to (or must by statute in the case of land) be excluded from any engineering certification if the certificate is not to be unfounded and thus potentially misleading.

Thus, we are not able to accede to Mr Nel’s request in relation to those matters that we stated in our letter of 11 October 2011 were outside our ambit and excluded from our certification.

However, there would appear to be no reason why Vector could not provide other methods of certification in relation to these asset classes, methodologies, calculations or suchlike, if considered necessary in support of the material it has already provided.

Yours faithfully,

**Wilson Cook & Co Limited**





**SUPPLEMENTARY INFORMATION REQUIRED  
BY THE COMMERCE COMMISSION ON  
ADJUSTMENTS TO  
GAS TRANSMISSION NETWORK OPTIMISED  
DEPRIVAL VALUATION  
(as at 30<sup>th</sup> June 2003)**

**July 2012**

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## A. Introduction

Additional information is provided in response to a query from the Commerce Commission received on 26 June 2012. This information is supplementary to, and should be read in conjunction with, "Adjustments to Gas Transmission Network Optimised Deprival Valuation (as at 30<sup>th</sup> June 2003) October 2011" (**the Report**).

## B. Additional Information Requirements

### 1. Land at stations

#### Request from the Commerce Commission

*"In relation to Land at Stations – As per 2(d) of Schedule C of the Commission's Information Request, the Independent Engineer's report must provide the minimum information for each category of asset adjustment outlined in Table 1, together with such additional information sufficient to allow a reader of the report: (i) to understand the data, information, calculations and assumptions employed in respect of each category of asset adjustment; (ii) to understand the extent to which professional judgment was exercised by the engineer and the effect of that judgment in deriving the resultant asset values; and (iii) to verify the arithmetical accuracy of the asset adjustment calculations. NCL notes that in the absence of sufficient information, such as the breakdown of the land assets proposed to be included, value of the land prior to its adjustment to 2003 values, and the CPI used to adjust the value of the land, it is not possible to understand and assess the accuracy of the proposed adjustment and it is therefore required that more details about the proposed adjustment be provided.*

*NCL further notes that Vector has indicated that the proposed values are based on government valuations; however, the independent engineer has specifically indicated in its report that they have not conducted the verification and that these values may need to be provided by a qualified party particularly a registered valuer. From this, and consistent with the requirement under 2(e) the Commission's Information Request, NCL is of the view that the Independent Engineer (Wilson Cook & Co Limited) should state that a qualified party supplied or reviewed the land values proposed to be included (together with details on the reviewer and the nature of the review), although this may mean that Vector would need to secure the opinion of a registered valuer as indicated by Wilson Cook & Co Limited in their Independent Engineer's report."*

#### Vector response

As noted in the Report, Vector included \$5,072,797 for land on which stations are built in the 2003 valuation. This value is the combined value of 140 land parcels listed in Table 1.

The value for each land parcel was based on the most recent government valuation as contained in each district valuation roll. Government valuations, now called council rating values, are compiled by statute, mainly as a uniform basis for levying local and

regional council rates. Only the land value portion of valuations excluding any improvements was included in the RAB.

The Rating Valuations Act 1998 requires councils to maintain the valuation rolls. All valuation services required by this Act must be carried out by a registered valuer or by some other person or body of a class approved for the purpose by rules made under this Act. Accordingly Vector considers the valuations in Table 1 were completed by a qualified party under Schedule C.

In order to include the value of land in 2003 for Input Methodologies purposes all values were adjusted by CPI (Series SE9A) movements.

A review of the included land value was performed by KPMG in their capacity as auditor under the July 2011 s53ZD notice in order to provide their audit certificate. The review included sample checking of government valuation notices, CPI adjustment and compliance with Input Methodologies.

**Table 1 - Land value included in RAB**

| Gas Transmission Station                   | Government Valuation |            |         | CPI adjusted Value<br>June 2003 |
|--|----------------------|------------|---------|---------------------------------|
|  | VNZ Roll slip        | Land Value | Date    |                                 |
| Matapu Delivery Point                      | 12131/23601          | \$ 3,500   | 1/09/09 | \$ 2,961                        |
| Hawera Delivery Point                      | 12300/12302          | \$ 23,000  | 1/09/09 | \$ 19,455                       |
| Patea Delivery Point                       | 12440/01901          | \$ 7,000   | 1/09/09 | \$ 5,921                        |
| Patea MLV                                  | 12440/580            | \$ 6,000   | 1/09/09 | \$ 5,075                        |
| Waitotara Delivery Point                   | 12420/14701          | \$ 5,500   | 1/09/09 | \$ 4,652                        |
| Mosston Road MLV                           | 13190/508            | \$ 7,000   | 1/09/10 | \$ 5,921                        |
| Wanganui Delivery Point                    | 13120/436            | \$ 38,000  | 1/09/10 | \$ 32,143                       |
| Turakina MLV                               | 13470/37601          | \$ 5,000   | 1/09/08 | \$ 4,229                        |
| Raumai Scraper Station                     | 13500/24602          | \$ 17,000  | 1/09/08 | \$ 14,380                       |
| Flockhouse Delivery Point                  | 13500/37613          | \$ 5,000   | 1/09/08 | \$ 4,229                        |
| Himatangi Offtake                          | 14220/27401          | \$ 800     | 1/08/10 | \$ 677                          |
| Foxtton Delivery Point                     | 14770/448            | \$ 45,000  | 1/09/08 | \$ 38,064                       |
| Whirokino MLV                              | 14770/18914          | \$ 500     | 1/09/08 | \$ 423                          |
| Oturoa Rd MLV                              | 14790/02001          | \$ 2,000   | 1/09/08 | \$ 1,692                        |
| Waikanae MLV                               | 15150/11901          | \$ 4,500   | 1/08/08 | \$ 3,806                        |
| Paraparaumu Delivery Point                 | 15300/06903          | \$ 7,000   | 1/08/08 | \$ 5,921                        |
| Pauatahanui No.2 Delivery Point            | 15444/194            | \$ 18,000  | 1/09/10 | \$ 15,225                       |
| Waitangirua Delivery Point                 | 15601/004            | \$ 14,000  | 1/09/10 | \$ 11,842                       |
| Waverley Delivery Point                    | 12400/10704          | \$ 13,000  | 1/09/09 | \$ 10,996                       |
| Palmerston North Delivery Point            | 14420/07902          | \$ 84,000  | 1/08/10 | \$ 71,052                       |
| Levin Delivery Point                       | 14810/75601          | \$ 33,000  | 1/09/08 | \$ 27,913                       |
| Longburn Offtake                           | 14420/19601          | \$ 2,000   | 1/08/10 | \$ 1,692                        |
| Feilding Offtake                           | 14410/16304          | \$ 4,000   | 1/08/10 | \$ 3,383                        |
| Kuku Delivery Point                        | 14810/24202          | \$ 500     | 1/09/08 | \$ 423                          |
| Te Horo Delivery Point                     | 14871/324            | \$ 1,500   | 1/08/08 | \$ 1,269                        |
| Eltham-Kaponga No 1 Offtake                | 12131/18002          | \$ 1,000   | 1/09/09 | \$ 846                          |
| Stratford Delivery Point                   | 12031/17201          | \$ 1,500   | 1/09/08 | \$ 1,269                        |
| Tariki MLV                                 | 11800/34502          | \$ 9,500   | 1/09/10 | \$ 8,036                        |
| Kaimata Tie-In Station (Inglewood Offtake) | 11810/04902          | \$ 2,000   | 1/09/10 | \$ 1,692                        |
| McKee Mixing Station                       | 11540/17102          | \$ 11,000  | 1/09/10 | \$ 9,304                        |

|   |             |    |           |         |    |           |
|---|-------------|----|-----------|---------|----|-----------|
| New Plymouth Offtake                    | 11540/21201 | \$ | 2,000     | 1/09/10 | \$ | 1,692     |
| Waiiti MLV                              | 11520/06101 | \$ | 2,000     | 1/09/10 | \$ | 1,692     |
| Mohakatino Scraper Station              | 11500/02801 | \$ | 33,000    | 1/09/10 | \$ | 27,913    |
| Mahoenui Compressor Station             | 5831/124    | \$ | 5,000     | 1/09/09 | \$ | 4,229     |
| Mangaotaki MLV                          | 5821/109    | \$ | 200       | 1/09/09 | \$ | 169       |
| Waitomo Blind Tap                       | 5811/695    | \$ | 200       | 1/09/09 | \$ | 169       |
| Cannon Road MLV                         | 5550/422    | \$ | 300       | 1/09/10 | \$ | 254       |
| Temple View Delivery Point              | 4175/455    | \$ | 25,000    | 1/09/09 | \$ | 21,147    |
| Waipuna MLV                             | 6331/397    | \$ | 1,500     | 1/07/08 | \$ | 1,269     |
| Tikotiko MLV                            | 6323/274    | \$ | 600       | 1/07/08 | \$ | 508       |
| Tuakau South MLV                        | 6300/108    | \$ | 1,000     | 1/07/09 | \$ | 846       |
| Tuakau Delivery Point                   | 3790/33401  | \$ | 51,000    | 1/07/09 | \$ | 43,139    |
| Harrisville Delivery Point              | 3790/41301  | \$ | 3,000     | 1/07/09 | \$ | 2,538     |
| Papakura Delivery Point                 | 37401/010   | \$ | 195,000   | 1/09/09 | \$ | 164,943   |
| Inglewood Delivery Point                | 11810/00202 | \$ | 10,000    | 1/09/10 | \$ | 8,459     |
| New Plymouth Delivery Point             | 11661/43478 | \$ | 100,000   | 1/09/10 | \$ | 84,586    |
| Kaponga Delivery Point                  | 12121/12001 | \$ | 5,500     | 1/09/09 | \$ | 4,652     |
| Te Kowhai Delivery Point                | 4410/44001  | \$ | 3,000     | 1/07/08 | \$ | 2,538     |
| Eltham-Kaponga No 2 Offtake             | 12131/01301 | \$ | 2,000     | 1/09/09 | \$ | 1,692     |
| Pembroke Road Interchange               | 12031/17202 | \$ | 19,000    | 1/09/08 | \$ | 16,071    |
| Derby Road Compressor Station           | 12001/26502 | \$ | 54,000    | 1/09/08 | \$ | 45,676    |
| Kaimiro Mixing Station                  | 11800/18801 | \$ | 29,000    | 1/09/10 | \$ | 24,530    |
| Kapuni Delivery Point                   | 12231/13801 | \$ | 11,000    | 1/09/09 | \$ | 9,304     |
| Pungarehu No 1 Delivery Point           | 11920/29301 | \$ | 4,000     | 1/09/09 | \$ | 3,383     |
| Okato Delivery Point                    | 11632/25201 | \$ | 4,000     | 1/09/10 | \$ | 3,383     |
| Frankley Road Offtake                   | 11610/25016 | \$ | 405,000   | 1/09/10 | \$ | 342,574   |
| Rotowaro Compressor Station             | 6331/02302  | \$ | 60,000    | 1/07/08 | \$ | 50,752    |
| Glen Murray Road MLV                    | 6321/01202  | \$ | 200       | 1/07/09 | \$ | 169       |
| Pukekawa MLV                            | 6310/11702  | \$ | 1,000     | 1/07/09 | \$ | 846       |
| Whangarata Road MLV                     | 3790/34102  | \$ | 18,000    | 1/07/09 | \$ | 15,225    |
| Glenbrook Offtake                       | 3790/06503  | \$ | 16,000    | 1/07/09 | \$ | 13,534    |
| Papakura East Pressure Reducing Station | 37401/22104 | \$ | 28,000    | 1/09/09 | \$ | 23,684    |
| Clevedon Road MLV                       | 36703/46401 | \$ | 1,500     | 1/09/09 | \$ | 1,269     |
| Flat Bush Delivery Point                | 36400/20004 | \$ | 8,000     | 1/09/08 | \$ | 6,767     |
| Smales Road MLV                         | 36510/22401 | \$ | 14,000    | 1/09/08 | \$ | 11,842    |
| Waiouru MLV                             | 36510/31601 | \$ | 6,000     | 1/09/08 | \$ | 5,075     |
| Westfield Delivery Point                | 2590/11601  | \$ | 2,190,000 | 1/07/08 | \$ | 1,852,435 |
| Horotiu West Delivery Point             | 4410/477    | \$ | 6,000     | 1/07/08 | \$ | 5,075     |
| Horotiu East MLV                        | 4421/080    | \$ | 14,000    | 1/07/08 | \$ | 11,842    |
| Kuranui Rd Scraper Station              | 5305/37801  | \$ | 10,000    | 1/07/09 | \$ | 8,459     |
| Waitoa Delivery Point                   | 5308/38601  | \$ | 2,500     | 1/07/09 | \$ | 2,115     |
| Runciman Road Pressure Reducing Station | 3790/07101  | \$ | 1,500     | 1/07/09 | \$ | 1,269     |
| Pukekohe Delivery Point                 | 3780/11804  | \$ | 32,000    | 1/07/09 | \$ | 27,068    |
| Kingseat Delivery Point                 | 3720/34404  | \$ | 24,000    | 1/07/09 | \$ | 20,301    |
| Waiuku Delivery Point (Removed)         | 3770/23001  | \$ | 8,000     | 1/07/09 | \$ | 6,767     |
| Te Kuiti North Delivery Point           | 5811/31804  | \$ | 300       | 1/09/09 | \$ | 254       |
| Matangi Delivery Point                  | 4441/52015  | \$ | 10,000    | 1/07/08 | \$ | 8,459     |
| Kiwitahi Delivery Point                 | 5306/014    | \$ | 10,000    | 1/07/09 | \$ | 8,459     |
| Te Rapa Delivery Point                  | 4410/45801  | \$ | 2,000     | 1/07/05 | \$ | 1,692     |
| Te Kuiti South Delivery Point           | 5862/172    | \$ | 300       | 1/09/09 | \$ | 254       |
| Oakura Delivery Point                   | 11631/07101 | \$ | 6,000     | 1/09/10 | \$ | 5,075     |
| Ngaruawahia Delivery Point              | 6281/38611  | \$ | 1,500     | 1/07/08 | \$ | 1,269     |
| Ramarama Delivery Point                 | 3740/44001  | \$ | 24,000    | 1/07/09 | \$ | 20,301    |

|                                     |             |    |         |         |    |         |
|-------------------------------------|-------------|----|---------|---------|----|---------|
| Hunua Delivery Point                | 35030/45205 | \$ | 2,000   | 1/09/09 | \$ | 1,692   |
| Alfriston Delivery Point            | 36703/77801 | \$ | 12,000  | 1/09/09 | \$ | 10,150  |
| Te Awamutu North Delivery Point     | 4471/06001  | \$ | 17,000  | 1/08/08 | \$ | 14,380  |
| Pirongia Delivery Point             | 4601/11703  | \$ | 98,000  | 1/08/08 | \$ | 82,894  |
| Henderson Valley Compressor Station | 30939/58901 | \$ | 375,000 | 1/09/07 | \$ | 317,198 |
| Kanohi MLV                          | 30710/06501 | \$ | 250     | 1/09/07 | \$ | 211     |
| Kaipara Flats Offtake               | 890/02402   | \$ | 25,000  | 1/09/07 | \$ | 21,147  |
| Wellsford Delivery Point            | 850/19402   | \$ | 36,000  | 1/09/07 | \$ | 30,451  |
| Brown Road MLV                      | 1220/01201  | \$ | 2,000   | 1/09/08 | \$ | 1,692   |
| Salle Road MLV                      | 290/14402   | \$ | 7,000   | 1/09/09 | \$ | 5,921   |
| Whangarei Offtake                   | 350/45901   | \$ | 250     | 1/09/09 | \$ | 211     |
| Maungatapere Delivery Point         | 350/41202   | \$ | 23,000  | 1/09/09 | \$ | 19,455  |
| Waitoki Delivery Point              | 30710/22390 | \$ | 43,000  | 1/09/07 | \$ | 36,372  |
| Warkworth Delivery Point            | 1281/84804  | \$ | 102,000 | 1/09/07 | \$ | 86,278  |
| Whangarei Delivery Point            | 752/049     | \$ | 255,000 | 1/09/09 | \$ | 215,695 |
| Waimauku Delivery Point             | 30920/27801 | \$ | 59,000  | 1/09/07 | \$ | 49,906  |
| Pokuru Compressor Station           | 4611/223    | \$ | 123,000 | 1/08/08 | \$ | 104,041 |
| Kihikihi Delivery Point             | 4651/02603  | \$ | 1,300   | 1/08/08 | \$ | 1,100   |
| Waikeria Delivery Point             | 4651/17901  | \$ | 1,000   | 1/08/08 | \$ | 846     |
| Parawera Road MLV                   | 4651/21901  | \$ | 500     | 1/08/08 | \$ | 423     |
| Lichfield Meter Station             | 5413/030    | \$ | 69,000  | 1/09/09 | \$ | 58,364  |
| Lichfield MLV                       | 5413/10802  | \$ | 400     | 1/09/09 | \$ | 338     |
| Tokoroa Delivery Point              | 5414/04201  | \$ | 1,000   | 1/09/09 | \$ | 846     |
| Kinleith Scraper Station            | 5414/00509  | \$ | 112,000 | 1/09/09 | \$ | 94,736  |
| Nicholson Road MLV                  | 7000/47103  | \$ | 1,000   | 1/07/08 | \$ | 846     |
| Earthquake Flat Road MLV            | 7010/02213  | \$ | 2,000   | 1/07/08 | \$ | 1,692   |
| Rotorua/Taupo Offtake               | 7010/02203  | \$ | 2,000   | 1/07/08 | \$ | 1,692   |
| Rainbow Mountain Delivery Point     | 7010/44802  | \$ | 3,000   | 1/07/08 | \$ | 2,538   |
| Ash Pit Road MLV                    | 7010/46401  | \$ | 2,000   | 1/07/08 | \$ | 1,692   |
| Kawerau Delivery Point              | 7281/01701  | \$ | 31,000  | 1/09/09 | \$ | 26,222  |
| Edgecumbe Delivery Point            | 7131/09905  | \$ | 10,000  | 1/09/10 | \$ | 8,459   |
| Reporoa Delivery Point              | 7030/06011  | \$ | 30,000  | 1/07/08 | \$ | 25,376  |
| Burnett Road MLV                    | 7161/07401  | \$ | 600     | 1/09/10 | \$ | 508     |
| Opotiki MLV                         | 7610/155    | \$ | 2,000   | 1/09/10 | \$ | 1,692   |
| Oponae Scraper Station              | 7630/511    | \$ | 2,000   | 1/09/10 | \$ | 1,692   |
| Trafford Hill MLV                   | 7630/544    | \$ | 1,000   | 1/09/10 | \$ | 846     |
| Oliver Road MLV                     | 8050/04401  | \$ | 2,000   | 1/09/08 | \$ | 1,692   |
| Waihuka MLV                         | 8050/08718  | \$ | 2,000   | 1/09/08 | \$ | 1,692   |
| Kaitaratahi Scraper Station         | 8250/02401  | \$ | 3,000   | 1/09/08 | \$ | 2,538   |
| Gisborne Delivery Point             | 8240/12510  | \$ | 106,000 | 1/09/08 | \$ | 89,661  |
| Opotiki Delivery Point              | 7610/16401  | \$ | 48,000  | 1/09/10 | \$ | 40,601  |
| Whakatane Delivery Point            | 7151/14506  | \$ | 80,000  | 1/09/10 | \$ | 67,669  |
| Taupo Delivery Point                | 7388/00102  | \$ | 54,000  | 1/07/10 | \$ | 45,676  |
| Paekakariki Nth MLV                 | 15400/011   | \$ | 4,500   | 1/08/08 | \$ | 3,806   |
| Saddle Road MLV                     | 14020/28103 | \$ | 4,000   | 1/08/10 | \$ | 3,383   |
| Foley Road Offtake                  | 11330/091   | \$ | 15,000  | 1/09/08 | \$ | 12,688  |
| Te Rehunga Delivery Point           | 11170/18601 | \$ | 10,000  | 1/09/08 | \$ | 8,459   |
| Dannevirke Delivery Point           | 11170/273   | \$ | 20,000  | 1/09/08 | \$ | 16,917  |
| Tataramoa Road MLV                  | 11160/35201 | \$ | 4,500   | 1/09/08 | \$ | 3,806   |
| Takapau Delivery Point              | 10800/00701 | \$ | 5,000   | 1/09/09 | \$ | 4,229   |
| Balfour Road Scraper Station        | 10780/09402 | \$ | 4,000   | 1/09/09 | \$ | 3,383   |
| Knight Road MLV                     | 9640/04401  | \$ | 2,500   | 1/08/10 | \$ | 2,115   |
| Bridge Pa MLV                       | 10430/01901 | \$ | 500     | 1/08/10 | \$ | 423     |

|                         |             |    |         |         |           |                  |
|-------------------------|-------------|----|---------|---------|-----------|------------------|
| Hastings Delivery Point | 10400/19101 | \$ | 200,000 | 1/08/10 | \$        | 169,172          |
| Hetherington Road MLV   | 5410/12701  | \$ | 5,000   | 1/09/09 | \$        | 4,229            |
| Mt Maunganui Offtake    | 6620/332    | \$ | 3,000   | 1/07/09 | \$        | 2,538            |
| Tauranga Delivery Point | 6607/05802  | \$ | 140,000 | 1/07/09 | \$        | 118,421          |
|                         |             |    |         |         | <b>\$</b> | <b>5,072,797</b> |

## 2. Line pack

### Request from the Commerce Commission

*"In relation to Linepack – As per 2(d) of Schedule C of the Commission's Information Request, the Independent Engineer's report must provide the minimum information for each category of asset adjustment outlined in Table 1, together with such additional information sufficient to allow a reader of the report: (i) to understand the data, information, calculations and assumptions employed in respect of each category of asset adjustment; (ii) to understand the extent to which professional judgment was exercised by the engineer and the effect of that judgment in deriving the resultant asset values; and (iii) to verify the arithmetical accuracy of the asset adjustment calculations. NCL notes that from the limited information provided, it is not possible to understand the proposed adjustment. Also, Vector has mentioned in the report that the value has been established in accordance with NZ IAS 16 and has been reviewed by a qualified accountant. However, it would assist the reader if more information about the qualified accountant and the nature of the review performed by them were supplied (especially in this case that the independent engineer has indicated that it did not review such information). Thus in order to fully comply, apart from the requirement of providing more details about the inclusion of linepack in the regulatory asset base, NCL is of the view that the Independent Engineer (Wilson Cook & Co Limited) should at a minimum state that a separate qualified party reviewed information in relation to linepack and reference or include documentation in relation to this review process in support of the proposed adjustment, and further state that the corresponding value meets the requirements of Schedule C."*

### Vector response

As noted in **the Report**, Vector included \$1.429 million for line pack in 2007. Line pack is the volume of residual gas contained within the pipeline system, necessary in order to maintain pressure in the network, and therefore required for the operation of the network.

Line pack was included in the RAB effective on 30 June 2007 when the ownership of line pack transferred from the Vector Gas Wholesale Group to the Vector Gas Transmission business. The value of line pack on that day was determined and provided by Vector's Finance department under the leadership of the Vector Group Financial Controller (BCom, CA) and the Vector Acting Chief Financial Officer (BCA, LLB (Hons), CA) who are considered by Vector to be qualified parties under Schedule C.

The value is made up of the quantity (GJ) of gas and the gas tender price posted just prior to the balance date. The quantity and price on 30 June 2007 was 232,399 GJ and \$6.15 per GJ resulting in a value of \$1,429,018.

### 3. Correction of asset ages

#### Request from the Commerce Commission

*"In relation to the Correction of Asset Ages – it is unclear in the report what tests Vector has employed to determine the error in the asset ages and how the adjustments were calculated. It is also worth noting that the independent engineer (Wilson Cook & Co Limited) has not reviewed this adjustment as the adjustment relates to depreciation which the independent engineer specifically qualified is a matter outside their ambit and therefore not covered by their opinion. Given this, NCL is of the view that sufficient information should be provided in order to enable a more thorough review and understanding of such correction. Other than this, while it is recognised that certain asset adjustments may be reviewed by a party other than the independent engineer, it is required that the independent engineer (Wilson Cook & Co Limited) has to indicate that such values have been supplied or reviewed by an appropriately qualified party. Details on the review performed as it relates to this proposed adjustment (e.g. name of the reviewer, nature of the review undertaken, etc.) including a copy of such review document to support the proposed adjustment is also recommended to be submitted."*

#### Vector response

As noted in **the Report**, Vector improved the accuracy of rolling forward the 2003 asset register adjusted under IM allowances. The roll forward was done at an individual asset basis, considering each asset's correct commissioning date and assigned standard life.

The adjusted roll forward process resulted in different annual depreciation amounts to what was disclosed under the Gas (Information Disclosure) Regulations 1997. The annual differences at an aggregate level are provided in **the Report** in Appendix A. It was not possible to accurately reconcile the differences on an individual disaggregated level due to insufficient information available from the original 2003 NGC valuation. Vector has in previous submissions explained in detail the shortcomings of the 2003 NGC valuation and its unsuitability as a reference point under the IM requirements<sup>1</sup>.

Vector engaged PricewaterhouseCoopers (Lynne Taylor, Advisory Director, Energy Team) who Vector considers a suitably qualified party under Schedule C to roll forward the adjusted 2003 asset register to 2009 at a disaggregated asset level. PwC prepared a custom built database for this purpose following the IM rules and requirements.

A review of the roll forward was performed by KPMG in their capacity as auditor under the July 2011 s53ZD notice in order to provide their audit certificate. The review included extensive IT analyses of the PwC database to verify completeness and accuracy, comparative roll forward analytics and reconciliation with historical disclosures.

### 4. Intangible assets

#### Request from the Commerce Commission

*"In relation to Intangible Assets – your independent engineer (Wilson Cook & Co Limited) has indicated that it has not reviewed the proposed adjustment in relation to intangible assets as it is a matter outside their ambit; however, NCL notes that Vector has*

<sup>1</sup> Website: [www.comcom.govt.nz](http://www.comcom.govt.nz). Document: /assets/Pan-Industry/Input-Methodologies/Draft-Reasons-Papers/Draft-Reasons-EDBs/AssetValuationSub/Vector-Attachment-Submission-on-EDBs-and-GPBs-Input-Methodologies-Asset-Valuation-Duncan-Ian-Head-Statement-Public-23-August-2010.

*submitted a separate report in relation to the aforementioned proposed adjustment. Solely for purpose of compliance, given the requirement as per 2(e) (i) of the Commission's Information Request, it is recommended that Wilson Cook & Co Limited, as your designated independent engineer, submits a statement that such proposed adjustment was reviewed by a qualified party and also reference the separate report."*

#### Vector response

As noted in **the Report** Vector elected to include a value of \$10.413 million for intangible assets (excluding goodwill) as allowed under the 2010 IM clause 2.2.1(2)(c)(i) for assets omitted in error. This asset is treated as an "included" type and has been included in 2005.

The value is based on an internal Vector investigation in September 2011 to identify and value intangible assets to be included in the RAB. The investigation was conducted under the guidance of the suitably qualified senior employees of Vector – the Vector Group Financial Controller (BCom, CA) and the Vector Acting Chief Financial Officer (BCA, LLB (Hons), CA) who are considered by Vector to be qualified parties under Schedule C. A review of the information was performed by KPMG in their capacity as auditor under the July 2011 s53ZD notice in order to provide their audit certificate.

Due to the materiality of this adjustment, Vector also engaged Sinclair Knight Merz to review and certify the information. A report by Sinclair Knight Merz was submitted as part of the s53ZD notice. The report provides a detailed review and breakdown of the processes followed to identify and value included intangible assets. The report also complies with all the requirements for the Independent Engineer's report in Schedule C of the s53ZD notice. Vector's interpretation of Schedule C is that it does not preclude more than one party to act as Independent Engineer.

## 5. Tests for asset quantities and asset life

#### Request from the Commerce Commission

*"As per 2(e) (iii) of Schedule C of the Commission's Information Request, the independent engineer should explain the tests performed to determine the quantity, and physical asset life of the assets. NCL notes that such information was not provided and should be provided for compliance."*

#### Vector response

In **the Report** Vector notes that in order to address the shortcomings of the 2003 NGC valuation (shortcomings discussed in detail under previous submission<sup>2</sup>), Vector produced a robust internal valuation of the gas transmission network in 2008<sup>3</sup>. The 2008 asset register was used as the basis for identifying adjustments allowed under the 2010 Input Methodologies.

<sup>2</sup> Website: [www.comcom.govt.nz](http://www.comcom.govt.nz). Document: /assets/Pan-Industry/Input-Methodologies/Draft-Reasons-Papers/Draft-Reasons-EDBs/AssetValuationSub/Vector-Attachment-Submission-on-EDBs-and-GPBs-Input-Methodologies-Asset-Valuation-Duncan-Ian-Head-Statement-Public-23-August-2010.

<sup>3</sup> Vector Limited "Optimised Deprival Valuation for the Gas Transmission Network As at 30 June 2008", Undisclosed Internal Vector Report

A major step in producing the 2008 valuation was to create an asset register by recording all individual assets, their ages, installation dates, refurbishment history, quantity and any information that would affect the assessment of useful life. The main source of asset register information is Vector's computerised Geographical Information System (GIS) but also includes other systems or programmes (for example Microsoft Excel). The 2008 register was reviewed by PricewaterhouseCoopers (Lynne Taylor, Advisory Director, Energy Team) in June 2009 following general ODV audit practice including sample testing tracing individual assets back to source systems and reasonableness tests to sign off on completeness and accuracy.

A review of the adjusted asset information under the 2010 Input Methodologies was performed by KPMG in their capacity as auditor under the July 2011 s53ZD notice in order to provide their audit certificate. The review included sample testing of individual asset data tracing back to source systems (e.g. GIS) and sample testing post 2003 additions to ensure that these were not already included in the adjusted 2003 asset register.



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Vector Limited  
101 Carlton Gore Road  
PO Box 99882  
Newmarket  
Auckland

Attention: Brett Butler

30 January 2013

ZP00385.13

Dear Brett,

**Statement Regarding Engineer's Report on the  
Line Pack RAB Adjustment for Vector Ltd's Gas Transmission Business**

**Introduction**

On 6 July 2011 Vector Limited (Vector) received, from the Commerce Commission (Commission) a "Notice to supply information to the Commerce Commission – Section 53ZD of the Commerce Act 1986" (Section 53ZD Notice). Associated with this Section 53ZD Notice was the requirement that Vector supply an Engineer's Report in respect of the asset adjustment process used to establish an Initial Regulatory Asset Base (Initial RAB) defined in the Commission's document "*Commerce Act (Gas Transmission Services Input methodologies) determination 2010*" (GTB IMs).

Vector's response to the Section 53ZD Notice, dated October 2011, did not contain an Engineer's Report relating to its "line pack" asset. The Commission's reviewer of Vector's proposed adjustments to its RAB has indicated that an Engineer's Report on the line pack asset is required to support the inclusion of the value of the line pack asset in the initial RAB.

Vector has requested Sinclair Knight Merz (SKM) to provide an Engineer's Report on the inclusion of its line pack asset as at 30 June 2009 with reference to clause 2.2.1(2) of the GTB IMs associated with Vector's Gas Transmission Business (GTB). SKM understands that the determined value will be included in the Vector GTB Initial RAB in response to the Section 53ZD Notice.

SKM's findings are set out in the attached report which has been prepared to comply with the requirements for the Engineer's report in Schedule C of the Commerce Commission's Section 53ZD Notice. This letter incorporates the signed statement required by the Section 53ZD Notice.

Sinclair Knight Merz Limited

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Offices across Australia, New Zealand, UK, South East Asia, Middle East, the Pacific and Americas



### **Confirmation of Independence and Qualifications**

I, as a chartered professional engineer (as defined in section 6 of the Chartered Professional Engineers Act 2002), can confirm that:

- 1) SKM has acted independently with respect to Vector and its subsidiaries and affiliates;
- 2) SKM has significant experience in New Zealand, Australia and the United Kingdom in relation to the valuation of electricity and gas networks for both regulatory and financial reporting purposes. SKM's review and the preparation of the report were undertaken by Mr Stephen Wightman and Mr Cameron Parker. Mr Wightman and Mr Parker are professionally qualified and experienced in the type of work concerned and are familiar with the Vector Gas Transmission Business;
- 3) the report is in writing and accessible in electronic (PDF file-type) format and includes a copy of the written instructions provided to SKM by Vector (included as Appendix A to the attached report), including any subsequent variations or modifications;
- 4) the report includes the value determined in accordance with clause 2.2.1(2) of the GTB IMs to be included in Schedule A4 of the Information Disclosure Notice Templates as the asset value adjustment relating to line pack;
- 5) the report provides the minimum information for the "line pack" category of asset adjustment outlined in Table 1 Schedule C of the Section 53ZD Notice, together with such additional information sufficient to allow a reader:
  - i. to understand the data, information, calculations and assumptions employed in respect of each category of asset adjustment;
  - ii. to understand the extent to which professional judgement was exercised by SKM and the effect of that judgement in deriving the resultant asset values;
  - iii. to verify the arithmetical accuracy of the asset adjustment calculations; and

I can confirm that SKM is satisfied that:

- i. the value of "included assets" used to supply gas transmission services was prepared in accordance with the requirements of clause 2.2.1 of the GTB IM for the line pack asset; and
- ii. the report meets the requirements of Schedule C of the Section 53ZD Notice.

**SIGNED** on behalf of Sinclair Knight Merz Ltd by:



**Designated Engineer**

A handwritten signature in purple ink, appearing to read 'R. Fairbairn', is written over a light purple rectangular background.

**Dr R. Fairbairn, MIET, MIPENZ, CPEng**  
Sinclair Knight Merz

**Assessor**

A handwritten signature in black ink, appearing to read 'S. Wightman', is written over a light purple rectangular background.

**S. Wightman, MIPENZ**  
Sinclair Knight Merz



## **Independent Engineer's Report on the Asset Adjustment Process relating to line pack used to supply Gas Transmission Services.**

### **1. Introduction**

On 6 July 2011 Vector Limited (Vector) received, from the Commerce Commission (Commission) a "Notice to supply information to the Commerce Commission – Section 53ZD of the Commerce Act 1986" (Section 53ZD Notice) in respect of the asset adjustment process used to establish an Initial Regulatory Asset Base (initial RAB) defined in the Commission's document "Commerce Act (Gas Transmission Services Input Methodologies) Determination 2010" (GTB IMs).

Vector requested Sinclair Knight Merz (SKM) to provide independent advice on the value of its line pack asset associated with Vector's Gas Transmission Business (GTB) as at 30 June 2009. SKM understands that the determined value will be included in the Vector GTB initial RAB, in Vector's response to the Commerce Commission Section 53ZD Notice.

#### **1.1 Processes**

Vector provided SKM with a description of the line pack asset and has identified its value as recorded in the GTB's general ledger and financial statements when first registered in the GTB's asset register. The existence of line pack and its requirement by the GTB is discussed further in Section 1.3 - Line Pack Asset Description. SKM has made its assessment of the line pack asset value against the criteria in the New Zealand Equivalent to International Accounting Standard 16: Property, Plant and Equipment (NZ-IAS-16), which prescribes the accounting treatment for property, plant and equipment assets. In the interests of accuracy and completeness, there has been significant interaction between SKM and Vector during the valuation process.

#### **1.2 Information provided by Vector**

Vector supplied the following information in order for SKM to complete its review of Vector's GTB line pack asset:

- a) Vector – Notice to Supply Information to the Commerce Commission – Section 53ZD (July 2011) document;
- b) Adjustment to 2003 Gas Transmission ODV (October 2011) Vector report;
- c) Supplementary Information to Adjustment to 2003 Gas Transmission ODV (July 2012) Vector Report;



- d) The Review of the Independent Engineer's Reports on the Asset Adjustment Process of Gas Pipeline Businesses (October 2012), Nel Consulting Ltd;
- e) A detailed description of line pack, "What is line pack.doc";
- f) NGC Holding Limited – Gas Transmission Activities 2006 - 2010 Financial Disclosure documents; and
- g) A number of Vectors general ledger and audited financial account information and documents, SAP figures and excel files communicated via email.

### 1.3 Line Pack Asset Description

Line pack enables Vector to derive future economic benefits from its transmission pipeline by enabling the provision of its gas transmission services.

Line pack is a quantity of gas held in a gas transmission pipeline at any given time, expressed in terms of energy (normally GJ). It is necessary for the safe and continual provision of gas transmission services that Vector's GTB provides and will remain in place as long as those services are required and the transmission pipeline is utilised. Without line pack the transmission services that Vector provides would not be available, thus the pipeline must contain a certain quantity of gas at all times, and this gas makes up Vector's line pack.

The amount of line pack, and the size of the fluctuations in line pack, varies from pipeline to pipeline. Variability of line pack depends on the length and diameter(s) and maximum working pressure(s) of the pipeline, the normal inlet pressure range and the required delivery pressures. In all cases however, there is a line pack range within which a pipeline must operate in order for the GTB to safely and reliably meet its commitments to provide transmission capacity, as well as comply with regulations such as the Gas Governance (Critical Contingency Management) Regulations (2008).

Table 1 provides an indication of line pack, its variability and its proportion to total monthly quantities of gas conveyed by the Vector's transmission pipeline.

■ **Table 1 Line pack variability and proportion of monthly gas conveyed**

| Date          | Line pack (GJ) | Line pack % movement | Total monthly gas conveyed (GJ) | Line pack to gas conveyed |
|---------------|----------------|----------------------|---------------------------------|---------------------------|
| <b>Jun-12</b> | 232,645        | 15%                  | 9,419,236                       | 2.5%                      |
| <b>Jun-11</b> | 202,262        | -16%                 | 7,764,144                       | 2.6%                      |
| <b>Jun-10</b> | 239,441        | 2%                   | 8,298,097                       | 2.9%                      |



|               |         |           |      |
|---------------|---------|-----------|------|
| <b>Jun-09</b> | 233,973 | 8,794,184 | 2.7% |
|---------------|---------|-----------|------|

The figures in Table 1 suggest line pack, at any given time, equates to between approximately 2 % and 3% of the total monthly quantity of gas conveyed.

SKM notes that the ongoing cost of line pack variability and balancing is not considered to be material and has not been considered as part of Vector's asset adjustment.

#### **1.4 Asset Valuation**

SKM has considered the book value of the line pack asset, as stated in Vector's audited financial accounts, to be its fair value at the date that the asset was first recognised by Vector's GTB and ownership of the line pack was transferred from Vector's Gas Wholesale Group to the Vector Gas Transmission Business.

The value of line pack has been determined by Vector's Finance department under the leadership of the Vector Group Financial Controller and the Vector Acting Chief Financial Officer who are considered by Vector to be qualified parties under Schedule C of the Commerce Commission's Section 53ZD Notice.

SKM understands Vector has valued its line pack asset based on the quantity (GJ) of gas and the gas tender price just prior to the balance date. The quantity and price on 30 June 2007 is stated as 232,399 GJ and \$6.15 per GJ resulting in a value of \$1,429,018.

SKM has viewed copies of Vector's general ledger (SAP) entries stating the cost of line pack and indicating the transfer of ownership date. SKM has reviewed the basis of Vector's GTB 2007 audited financial accounts and notes these support the value stated.

#### **1.5 Useful Life**

The useful life is determined as the period over which an asset is expected to be available for use by an entity. SKM has determined the useful life to be the same as the remaining useful life of the underlying physical asset in which the line pack enables the safe and reliable operation of i.e., the gas transmission pipeline. The useful life varies between 10 years for control systems up to 80 years for the high pressure gas pipelines.

The weighted average remaining life of the system assets calculated using Vector's original 2003 valuation data, applying an average life of 65 years to gas pipeline assets, shows that the remaining life of the assets is 38.97 years as at 30 June 2007.



## 1.6 NZ-IAS-16 Value of Vector's GTB Line Pack Asset

The NZ-IAS-16 value of Vector's GTB line pack asset as at 30 June 2009 is \$1.522 million (exclusive of Goods and Services Tax).

| Vector's Gas Transmission Business NZ-IAS-16 Value |  |                 |
|--|--|-----------------|
| No.  | Description  | Value           |
|  | <b>Designated asset type: "Included" - GTB IM cl. Ref. 2.2.1(2)(c)<sup>1</sup></b>   |                 |
| 1  | <b>Line pack:</b> <ul style="list-style-type: none"> <li>▪ The quantity of gas recorded as line pack 232,388 GJ (May 2007); and</li> <li>▪ The value of the line pack asset as recorded in Vector's 2007 audited financial accounts, \$1,429,018.</li> </ul> | \$1.522m        |
|  | <b>TOTAL</b>   | <b>\$1.522m</b> |

Note 1 Clause 2.2.1: Asset adjustment process for setting initial RAB of the Commerce Act (Gas Transmission Services Input Methodologies) Determination 2010" (GTB IM).

## 2. Summary

The asset identified by Vector and discussed in Section 1.3 is defined as its line pack asset with its book value as at June 2007 being used to determine the value of the adjustment to the initial RAB. The category for including these assets in the "asset adjustment process" is with reference to GTB IM 2.2.1(2).

The fair value attributed to Vector's GTB line pack asset is \$1.429m<sup>1</sup> as at the date of the assets ownership transfer. Taking into account a remaining life of 38.97 years at 30 June 2007 the value as at 30 June 2009 is \$1.522m. The value of \$1.429m has been included by Vector in Line 3 of Schedule A4 of the Information Disclosure Notice Templates in the year 2007, see Appendix B.

SKM is satisfied that the valuation approach to determine the value of the line pack Asset, with reference to clause 2.2.1(2) of the GTB IMs, associated with Vector's GTB follows that in NZ-IAS-16: Property, Plant and Equipment.

In addition, it is SKM's professional opinion that the final figure arrived at is reasonable and aligns with Vector's audited financial statements.

<sup>1</sup> This value corresponds to \$1.522m in 2009 dollars for the Line Pack asset after indexing from 2007.



SKM notes that the line pack asset was first recognised under Vector's GTB ownership in 2007.

This opinion is intended to be used only to establish the value of the Gas Transmission Business line pack asset for inclusion in Vector's GTB initial RAB.





## Appendix A: Vector's Instruction to Engineer



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30 January 2013

Mr Stephen Wightman  
Strategic Consulting Manager  
Sinclair Knight Merz  
PO Box 10-283  
Wellington 6143  
New Zealand

Dear Stephen

#### **ENGINEERING REPORT AND OPINION IN RELATION TO ASSET ADJUSTMENT PROCESS FOR INCLUSION OF LINE PACK – TERMS OF ENGAGEMENT**

Thank you for agreeing to act as Vector Limited's (Vector) independent engineer for the purpose of our response to the Commerce Commission's request for information under section 53ZD of the Commerce Act 1986, in relation to the Commission's Commerce Act (Gas Transmission Services Input Methodologies) Determination 2010. This engagement relates specifically to the inclusion of Line Pack in Vector's asset base.

We are undertaking the asset adjustment process set out in clause 2.2.1 of the above Commerce Act and are required to provide the Commission with certain expert opinions and supporting information.

#### **Terms of Engagement**

Sinclair Knight Merz is engaged by Vector to provide your services to perform, on its behalf, the services set out below until 30 January 2013 or such date as we agree mutually.

You confirm that you meet the definition of "engineer" in clause 1.1.4 of the above Commerce Act – namely, that you are (a) a Chartered Professional Engineer; (b) acting in that professional capacity; and (c) independent (defined in turn as neither in a relationship with, nor having an interest in, for present purposes, Vector, that is likely to involve you in a conflict of interest between your duties to us and your duties to the Commission).

#### **The Services**

The services are: (a) the preparation of a report on the proposed asset adjustment for Line Pack, which meets the requirements set out in Schedule C (including Table 1 of that Schedule) of the 2011 Notices to Supply Information; (b) reporting to us on the progress of your work as required; and (c) all other work as required by us from time to time during the engagement.

The commercial terms of your engagement have been agreed previously with us by way of a separate agreement.

**Confidentiality**

You will be required to keep confidential all information and documents that you acquire during this engagement, other than where we specifically authorise you in writing to disclose such information or where you must do so by law.

I look forward to hearing whether these terms are acceptable to you.

Yours faithfully

A handwritten signature in blue ink, appearing to read "Brett Butler", with a stylized flourish at the end.

Brett Butler  
Group Manager Pricing & Valuation

## Appendix B: Schedule A4 - Asset Adjustment Process

|  |   | GTB Name              |         |         |         |         |         |         | Vector       |
|--|---|-----------------------|---------|---------|---------|---------|---------|---------|--------------|
|  |   | Disclosure Year Ended |         |         |         |         |         |         | 30 June 2010 |
| <b>SCHEDULE A4: ASSET ADJUSTMENT PROCESS</b> |   |                       |         |         |         |         |         |         |              |
| row  |   |                       |         |         |         |         |         |         |              |
| 6  | <u>Summary of Engineer's Valuation Adjustments (at time asset enters regulatory asset register)</u>     |                       |         |         |         |         |         |         |              |
| 7  | Show only the <u>incremental</u> amount of the valuation adjustment                                     |                       |         |         |         |         |         |         |              |
| 8  |   | 2003 *                | 2004 *  | 2005    | 2006    | 2007    | 2008    | 2009    | Ref          |
| 9  |   | (\$000)               | (\$000) | (\$000) | (\$000) | (\$000) | (\$000) | (\$000) |              |
| 10   | <b>Asset adjustment process - adjustments</b>   |                       |         |         |         |         |         |         |              |
| 11   | Include assets used to <b>supply gas transmission services</b>  |                       |         |         |         |         |         |         | 2.2.1(2)(b)  |
| 12   | Correct asset register errors   |                       |         |         |         |         |         |         |              |
| 13   | Land  | 5,073                 |         |         |         |         |         |         |              |
| 14   | Critical Spares   | 991                   |         |         |         |         |         |         |              |
| 15   | Linepack  |                       |         |         |         | 1,429   |         |         |              |
| 16   | Intangible Assets (excluding goodwill)  |                       |         | 10,413  |         |         |         |         |              |
| 17   |   |                       |         |         |         |         |         |         |              |
| 18   |   |                       |         |         |         |         |         |         |              |
| 19   |   |                       |         |         |         |         |         |         |              |
| 20   |   |                       |         |         |         |         |         |         |              |
| 21   |   |                       |         |         |         |         |         |         |              |
| 22   |   | 6,064                 | –       | 10,413  | –       | 1,429   | –       | –       | 2.2.1(2)(c)  |
| 23   |   |                       |         |         |         |         |         |         |              |
| 24   | <b>Total value of adjustments by disclosure year</b>  | 6,064                 | –       | 10,413  | –       | 1,429   | –       | –       |              |
| 25   | * Includes assets which first entered the regulatory asset register in a disclosure year prior to 2004. |                       |         |         |         |         |         |         |              |
| 26   |   |                       |         |         |         |         |         |         |              |

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GTB Name **Vector Limited (Trans)**  
Year Ended **30 June**

5 **SCHEDULE A2: ASSET ADJUSTMENT PROCESS (Public)**

6 **Summary of Engineer's Valuation Adjustments (at time asset enters regulatory asset register)**

|   |              |                |                |                |                |                |                |                 |                   | 2009 Dollars (\$000)**            |           |                   |             |
|---|--------------|----------------|----------------|----------------|----------------|----------------|----------------|-----------------|-------------------|-----------------------------------|-----------|-------------------|-------------|
| Show only the <u>incremental</u> amount of the valuation adjustment |              |                |                |                |                |                |                |                 |                   |                                   |           |                   |             |
|   | 2003 *       | 2004 Submitted | 2005 Submitted | 2006 Submitted | 2007 Submitted | 2008 Submitted | 2009 Submitted | Total Submitted | Asset Adjustments | Resulting Depreciation Adjustment | Other *** | Total Adjustments |             |
|   | (\$000)      | (\$000)        | (\$000)        | (\$000)        | (\$000)        | (\$000)        | (\$000)        | (\$000)         | (\$000)           | 2004-2009 (\$000)                 | (\$000)   | (\$000)           | Ref         |
| <b>Asset adjustment process - adjustments</b>                       |              |                |                |                |                |                |                |                 |                   |                                   |           |                   |             |
| <b>Correct asset register errors</b>                                |              |                |                |                |                |                |                |                 |                   |                                   |           |                   |             |
| Land  | 5,073        | 0              | 0              | 0              | 0              | 0              | 0              | 5,073           | (1,972)           |                                   |           | 3,101             |             |
| Critical Spares   | 991          | 0              | 0              | 0              | 0              | 0              | 0              | 991             |                   |                                   |           | 991               |             |
| Linepack  | 0            | 0              | 0              | 0              | 1,429          | 0              | 0              | 1,429           |                   |                                   |           | 1,429             |             |
| Intangible Assets (excluding goodwill)                              | 0            | 0              | 10,413         | 0              | 0              | 0              | 0              | 10,413          |                   |                                   |           | 10,413            |             |
|   |              |                |                |                |                |                |                | 0               |                   |                                   |           | 0                 |             |
|   |              |                |                |                |                |                |                | 0               |                   |                                   |           | 0                 |             |
|   |              |                |                |                |                |                |                | 0               |                   |                                   |           | 0                 |             |
|   |              |                |                |                |                |                |                | 0               |                   |                                   |           | 0                 |             |
|   |              |                |                |                |                |                |                | 0               |                   |                                   |           | 0                 |             |
|   |              |                |                |                |                |                |                | 0               |                   |                                   |           | 0                 |             |
| <b>Total value of adjustments by disclosure year</b>                | <b>6,064</b> | <b>0</b>       | <b>10,413</b>  | <b>0</b>       | <b>1,429</b>   | <b>0</b>       | <b>0</b>       | <b>17,906</b>   | <b>(1,972)</b>    | <b>0</b>                          | <b>0</b>  | <b>15,934</b>     | 2.2.1(2)(c) |

23

24 \* Includes assets which first entered the regulatory asset register in a disclosure year prior to 2003.

25 \*\* Provide supporting calculations showing how the adjustment values for each year have been converted into 31 March 2009 dollar values.

26 \*\*\* Provide descriptions and values for each category of item (further explanation can be provided in a separate note if necessary).

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Note: For consistency with previous information provided to the Commerce Commission, Asset Adjustments in column M are shown at their face value i.e. in the dollars of the year in which the asset entered the regulatory asset register. The resulting depreciation adjustment and revaluation adjustment have been shown in cells K13 and K14 respectively of Schedule A1.

Key:  
 Cells that can be amended  
 Locked cell