



The Review of the Independent Engineers' Reports on the Asset Adjustment Process of Gas Pipeline Businesses

Final Report
February 2013

Prepared for



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STATEMENT OF INDEPENDENCE

This review has been conducted under the terms and conditions as specified in the Agreement entered into by Nel Consulting Limited (NCL) for this project.

The review required NCL to rely extensively on data provided by the gas pipeline businesses (GPBs), including the Independent Engineers' Reports and other documents submitted during the course of this review.¹ NCL was not required to independently verify the accuracy of this information, nor audit any financial information. It is for this reason that the accuracy of this review was highly dependent on the information provided to NCL. Where inconsistencies or conflicts were found in the data provided, NCL exercised its own best judgment to resolve the said inconsistencies or requested further clarification.

NCL confirms that, to the extent possible and with the information available, the review results have been determined in an independent and unbiased manner, by applying the methodology as set out in this report, and represent our best financial and technical judgments in support of the comments or recommendations made in this report.

¹ The information provided for this project includes the Independent Engineer's Report (including any attachments submitted as part of the Independent Engineer's Report), Schedules A and B of the Information Notice Template, information provided in response to the Commission's Paper dated 19 June 2012, GasNet Limited's second addendum to the Independent Engineer's Report, and Vector Limited's Independent Engineer's Report on the inclusion of line pack asset.

1. EXECUTIVE SUMMARY

1.1 INITIAL REVIEW OF COMPLIANCE TO INFORMATION REQUIREMENTS

The review conducted by NCL consists of an assessment of the Independent Engineers' Reports submitted by the gas pipeline businesses (GPBs) with particular focus on each of the GPB's compliance with the information requirements set out in Schedule C of the Commerce Commission's (Commission) Information Request².

The tables below summarise the results of the review while details of the assessment can be found in Section 3, Section 4 and Appendix B of this report.

Table 1: General Compliance to Schedule C Requirements

Requirement	GDB		GTB		Overall Compliance
	GasNet Limited	Vector Limited (GDB)	Maui Development Limited	Vector Limited (GTB)	
The report must be completed by an 'engineer'	Yes	Yes	Yes	Yes	100%
The report must be in writing and accessible in electronic format	Yes	Yes	Yes	Yes	100%
The report must include a copy of the written instructions to the engineer	Yes	Yes	Yes	Yes	100%
The report must include a table summarising the various asset value adjustments	Yes	Yes	No	Yes	75%
The report must include a signed statement that where values are determined in accordance with GAAP ³ , those values have been reviewed by a qualified party	N/A	No	N/A	No	50%
The report must include a signed statement that where values are determined in accordance with the Gas Regulations 1997, the engineer has reviewed the assumptions	Yes	Yes	No	Yes	75%
The report must include a signed statement that explains the tests performed to determine the quantity and physical asset life of assets	Yes	No	No	No	25%
The report must include a signed statement that the report meets the requirements of Schedule C	Yes	Yes	No	Yes	75%

Note: 'Yes' means that the GPB has complied with the requirements set, 'No' means that the GPB has not complied or partly complied with a specific requirement, and N/A means that the requirement is not applicable to the GPB. In calculating the overall compliance, N/A was considered as compliant.

It can be observed from the table above that all of the GPBs have complied with the first three (3) requirements; however, most of the GPBs have not complied with the rest of the requirements.

² Notice to Supply Information to the Commerce Commission, Section 53ZD of the Commerce Act 1986, Commerce Commission, 6 July 2011.

³ Generally accepted accounting practice in New Zealand.

The succeeding table provides an overview of a GPB's compliance in terms of Table 1 of the Commission's Information Request. Table 1 of the aforementioned request sets out the minimum information requirements for adjustments in relation to the correction of asset register errors.

Table 2: Compliance to Schedule C – Table 1

Requirement - Correction of Asset Register Errors		GDB		GTB		Overall Compliance
		GasNet Limited	Vector Limited (GDB)	Maui Development Limited	Vector Limited (GTB)	
Included	Description including physical asset life and quantity	No	Yes	No	Yes	50%
	Value of the asset as of the day the asset enters the register	Yes	No	No	No	25%
Excluded	Description and quantity	N/A	Yes	N/A	N/A	100%
	Value of the asset as of the day the asset enters the register	N/A	Yes	N/A	N/A	100%
Value Modified	Description and type of error	Yes	Yes	N/A	Yes	100%
	Value of the asset as of the day the asset entered the register	Yes	No	N/A	No	50%
	Calculation of relevant adjustment	No	No	N/A	No	25%
	Resultant 'modified value' as of the day the asset entered the register	Yes	Yes	N/A	Yes	100%

Note: 'Yes' means that the GPB has complied with the requirements set, 'No' means that the GPB has not complied or partly complied with a specific requirement, and N/A means that the requirement is not applicable to the GPB. In calculating the overall compliance, N/A was considered as compliant.

The table above shows 100% compliance for the adjustment in relation to the correction of assets included in error i.e. assets that should be excluded from the regulatory asset base. On the other hand, there is low compliance for GPBs who have proposed adjustments relating to correction of assets omitted in error and correction of assets given an estimation of quantity, age, category or location now known to be incorrect.

1.2 DETAILED REVIEW OF ASSET VALUE ADJUSTMENTS

There were three (3) issues common to the review of the proposed asset adjustments of the GPBs. These issues and NCL's comments and/or recommendations are discussed below.

1. There was insufficient information provided by the GPBs e.g. replacement cost, quantity, physical asset life, consumer price index (CPI), etc. to enable a reader to understand the calculations and verify the accuracy of the proposed asset adjustments. Since such detailed information is required by the Commission as per Schedule C, GPBs who have failed to provide the necessary information were initially assessed as non-compliant and was recommended to provide more information in order to comply with the information requirement.

2. There was either no discussion in the report on the tests performed to check the quantity and physical asset life of the assets, or no sufficient information was provided to understand the test performed by the independent engineer in this regard. Since the accuracy of the quantity and applied asset life of the assets contribute significantly to the accuracy of the asset adjustment calculations, NCL recommended either for the required tests to be performed or that sufficient information be provided to be able to understand the tests undertaken by the independent engineer.

3. There were proposed adjustments that did not form part of the Independent Engineer's Report or were not reviewed by the independent engineer. It is worth noting that it is clearly stated in the Commission's Information Request that an expert opinion (through a written Independent Engineer's Report and complying with the requirements specified in Schedule C) should be provided for proposed asset adjustments. Furthermore, there were proposed adjustments that do not form part of the allowable adjustments as per clause 2.2.1.2 of the input methodologies. The aforementioned proposed adjustments were therefore either assessed as non-compliant or recommended to be excluded from the adjustments proposed by the relevant GPB.

1.3 ADDENDUM REVIEW

After taking account of the results of NCL's review of the submitted Independent Engineers' Reports as discussed above, further information was requested from the GPBs and the subsequent submissions were reviewed by NCL in terms of the GPBs' compliance with the requirements of Schedule C. NCL also conducted the review of the addendum to GasNet Limited's Independent Engineer's Report as well as the review of Vector Limited's Independent Engineer's Report on the line pack adjustment dated 30 January 2013. The results of this addendum review are summarised in the table below.

Table 3: Addendum Review – Compliance to Schedule C Requirements⁴

SCHEDULE C - General Compliance and Table 1 Compliance						
GPB	The report must be completed by an 'engineer'	The report must be in writing and accessible in electronic format	The report must include a copy of the written instructions provided to the engineer by the GPB	The report must include a table summarising the various asset value adjustments and corresponding to Schedule A4 of the Information Disclosure Notice Templates	The report must provide the minimum information for each category	The report must include a signed statement by the engineer
Gas Distribution Services (GDBs)						
Gasnet Limited	Yes	Yes	Yes	Yes	Yes	Yes
Vector Limited (GDB)	Yes	Yes	Yes	Yes	Yes	Yes
Gas Transmission Services (GTBs)						
Maui Development Limited	Yes	Yes	Yes	Yes	Yes	Yes
Vector Limited (GTB)	Yes	Yes	Yes	Yes	Yes	No ⁵
Overall Compliance	100%	100%	100%	100%	100%	75%

⁴ Table 3 presents the combined results of the compliance review, taking into account the general compliance requirements as well as the specific (Table 1) requirements of Schedule C of the Commission's Information Request.

⁵ The discussion around the non-compliance assessment of Vector Limited (GTB) can be found in Section 5 (page 29) of this report.

As can be seen from the table above, after the submission of additional information, the results from NCL's assessment show that Vector Limited (GTB) has not fully complied with the requirements set out in Schedule C.

The results of NCL's addendum review are presented in Section 5 and the tables for each GPB in Appendix B also include the results of this review for compliance with both general and specific requirements of Schedule C. Further issues in relation to the compliance review of the additional information submitted by the GPBs have been identified in Appendix B, and some of these issues were considered to warrant a 'non-compliance' assessment. It is further worth noting that the compliance assessment as presented in the table above excludes proposed adjustments that in NCL's opinion are not allowed for under clause 2.2.1.2 of the Gas Transmission and Distribution Services Input Methodologies, as well as proposed adjustments that were not reviewed by an independent engineer which is a foremost requirement in the Commission's Information Request.

Appendix A of this report presents the GPBs' proposed value adjustments to their regulatory asset base as well as NCL's recommended value adjustments based on the review of the Independent Engineers' Reports and subsequent additional information provided. In summary, NCL has recommended the following adjustments:

GDBs

1. A value for 'Impairment credit from EV' has been included in GasNet Limited's proposed asset value adjustments. NCL notes that clause 2.2.1.2 of the GDB IMs does not allow adjustments in relation to optimisation and economic value tests as part of asset adjustment processes that a GDB may elect to undertake. It is therefore recommended that such adjustment amounting to \$38,423 be excluded from GasNet's total proposed asset value adjustment.
2. In Vector Limited (GDB)'s subsequent submissions, they have provided a certification from KPMG on the treatment of Vector Limited (GDB)'s intangible assets. In the certification, KPMG has indicated that they consider only \$0.8 million out of the originally proposed \$1.44 million to be intangible assets based on the recognition criteria of IAS 38. Given that Vector Limited (GDB) has only provided a certification for \$0.8 million of the \$1.44 million, NCL is of the opinion that only the amount of \$0.8 million meets the requirements set in Schedule C of the Commission's Information Request. NCL therefore recommends that only \$0.8 million be included in Vector Limited (GDB)'s regulatory asset base.
3. Vector Limited (GDB) has included in their proposal for the modification of the values of specific asset categories, an adjustment which includes employing the same optimisation and economic value tests used in the 2003 Natural Gas Corporation valuation. The reapplication of the optimisation resulted to a decrease in the total optimisation value applied to the assets from \$4.327 million to \$3.791 million. In relation to the economic value tests, the adjustment resulted to an increase in the economic value from \$2.8 million to \$4.9 million. In discussions with the GDB, Vector Limited (GDB) has clarified that the proposed economic value test adjustment had no impact on the resulting optimised deprival valuation (ODV) value and for this reason should not form part of this adjustment process.

Further to the issue of optimisation, NCL notes that as per clause 2.2.1.2 of the Commerce Act (Gas Distribution Services Input Methodologies) Determination 2010,

optimisation and economic value tests do not form part of the allowed asset adjustment processes that a GDB may elect to undertake. For this reason and based purely on strict compliance to the Input Methodologies, it would be prudent to disallow the proposed adjustment in relation to optimisation. However, we have compared the Electricity Distribution Businesses (EDB) and GPB Input Methodologies and we note that the EDB Input Methodologies allows an EDB to re-apply the optimisation previously applied in the ODV valuation. A similar adjustment is what is being proposed by Vector for optimisation which the GPB Input Methodologies does not specifically include as adjustments that a GPB may elect to undertake. It is our viewpoint that as a consequence of including assets omitted in error, excluding assets included in error, and modifying the values, it is reasonable that the same optimisation should be reapplied to the ODV valuation.

From the above, it is difficult to make a recommendation that seems fair from an engineering viewpoint but may be interpreted as not strictly compliant with the GPB Input Methodologies. Given this, we believe the decision remains with the Commission to determine whether such optimisation adjustment should be allowed. Note that we have not adjusted the proposed value as presented in Appendix A.

GTBs

1. Vector Limited (GTB) has proposed the inclusion of line packs amounting to \$1.429 million. NCL notes that the proposed adjustment was neither reviewed by the independent engineer nor by any independent qualified party and therefore NCL has recommended in its draft review report dated October 2012 that this adjustment not be allowed.

In response to the Commission's letter dated 21 December 2012 which advises Vector Limited of what the Commission has disallowed in its proposed regulatory asset value adjustments, Vector has requested Sinclair Knight Merz (SKM) to provide an Independent Engineer's Report on the inclusion of its line pack asset. NCL has reviewed the Independent Engineer's Report and based on its review recommends the inclusion of line packs amounting to \$1.429 million in Vector Limited's regulatory asset base.

2. Vector Limited (GTB) has proposed the inclusion of 140 land parcels amounting to \$5.073 million. Following further communications with Vector Limited (GTB), Vector Limited (GTB) engaged TelferYoung Limited to estimate the land values proposed to be included as part of the regulatory asset base. The total value of the land portfolio estimated by TelferYoung is \$3.1 million. It is however worth noting that TelferYoung has indicated that neither the inspection of all the properties was undertaken, nor a full market investigation or a full market valuation of the land was completed. From the information provided, NCL notes that the \$3.1 million land asset value estimated by TelferYoung may materially change if a full market investigation/valuation would be conducted. However, in the absence of such full market valuation, NCL propose that \$3.1 million from the originally proposed \$5.073 million be included in the regulatory asset base at this time.

2. INTRODUCTION

2.1 OVERVIEW

NCL was contracted by the Commission to undertake the review and provide advice on the Independent Engineers' Reports on asset value adjustments as submitted to the Commission as part of completed statutory information requests.

These statutory information requests emanate from the requirements set out under Part 4 of the Commerce Act 1986 (the Act) from which it is required to set default price-quality paths (DPPs) for suppliers subject to default price quality regulation.

As part of setting the DPP, the Commission is required to specify the starting prices applying to each supplier in order to inform its decisions on any starting price adjustments. Given this, the Commission requested information from the GPBs by way of notice under 53ZD of the Act on 6 July 2011.

Suppliers of gas pipeline services include two (2) suppliers of gas transmission services (GTBs) and three (3) suppliers of gas distribution services (GDBs). Given that differences exist between gas distribution and transmission services, the Commission prepared separate input methodologies for each service.

Consistent with relevant input methodologies determined by the Commission in December 2010 – Commerce Act (Gas Distribution Services Input Methodologies) Determination 2010 (GDB IMs) and Commerce Act (Gas Transmission Services Input Methodologies) Determination 2010 (GTB IMs), a GPB is permitted to undertake an 'asset adjustment process' for setting its initial regulatory asset base.

Schedule C of the Commission's Information Request sets out the minimum information requirements necessary to be disclosed on adjustments to assets and requires an Independent Engineer's Report to be completed.

This report summarises NCL's review of the Independent Engineers' Reports on the asset value adjustments including additional information submitted by the following:

GDBs

1. GasNet Limited [GasNet];
2. Vector Limited [Vector (GDB)];

GTBs

3. Maui Development Limited [Maui Development]; and
4. Vector Limited [Vector (GTB)].

3. COMPLIANCE WITH INFORMATION REQUIREMENTS

3.1 INTRODUCTION

As per the GDB IMs⁶ and GTB IMs⁷, a GPB is allowed to adjust its initial regulatory asset base. To be able to do this however, a GPB must comply with the minimum information requirements set out in Schedule C⁸ of the Commission's Information Request. The aforementioned schedule also clearly specifies foremost compliance to the asset adjustment process as set out in clause 2.2.1 of the GDB and GTB IMs.

There exists some differences in the adjustment process detailed in the GDB and GTB IMs and subsequent differences in the adjustment allowances are highlighted below. The GDB and GTB IMs stipulate that a GDB and/or GTB may choose to undertake none, some or all of the following adjustments:

1. Modify the value of an asset owned by NGC Holdings Limited or a subsidiary company thereof;
2. Designate an asset, except one of those described in clause 2.2.1 sub-clause (4) of the GDB and GTB IMs, used to supply gas services;
 - a. As per clause 2.2.1 sub-clause (4) of the GDB IMs, the assets are:
 - i. 2009 authorisation assets;
 - ii. Assets that were eligible to be 2009 authorisation assets;
 - iii. 2009 disclosed assets;
 - iv. Assets that were eligible to be 2009 disclosed assets;
 - v. Easement land; and
 - vi. Intangible assets, unless they are finance leases or identifiable non-monetary assets.
 - b. As per clause 2.2.1 sub-clause (4) of the GTB IMs, the assets are:
 - i. 2009 disclosed assets;
 - ii. Assets that were eligible to be 2009 disclosed assets;
 - iii. Easement land; and
 - iv. Intangible assets, unless they are finance leases or identifiable non-monetary assets.

⁶ Commerce Act (Gas Distribution Services Input Methodologies) Determination 2010, Commerce Commission, 22 December 2010.

⁷ Commerce Act (Gas Transmission Services Input Methodologies) Determination 2010, Commerce Commission, 22 December 2010.

⁸ The requirements under Schedule C of the Commission's Information Request are the same for GDBs and GTBs.

3. Correct the following types of asset register errors where the error relates to 2009 disclosed assets;
 - a. Assets omitted in error;
 - b. Assets included in error; and
 - c. Assets allocated to the incorrect asset category, or given an estimation of quantity, age, category or location now known to be incorrect.

3.2 REVIEW RESULTS

This portion of the review focuses on a GPB's compliance to the information requirements set out in Schedule C of the Commission's Information Request. A more comprehensive review was conducted by NCL in relation to the specific proposed adjustments which are discussed in more detail in the subsequent section.

NCL's compliance review of each of the Independent Engineers' Reports submitted by the GPBs is presented in Appendix B of this report and lists the different minimum requirements for an Independent Engineer's Report as well as the minimum information requirements for each proposed adjustment. Where NCL believes a particular information submission is unclear, we have indicated the reason for uncertainty or specified additional information that may be submitted in order to ascertain the compliance to a particular requirement.

The following tables summarise the results of NCL's review of the GPBs' compliance to Schedule C and Table 1 of the Commission's Information Request.

Table 4: General Compliance to Schedule C Requirements

Requirement	GDB		GTB		Overall Compliance
	GasNet	Vector (GDB)	Maui Development	Vector (GTB)	
The report must be completed by an 'engineer'	Yes	Yes	Yes	Yes	100%
The report must be in writing and accessible in electronic format	Yes	Yes	Yes	Yes	100%
The report must include a copy of the written instructions to the engineer	Yes	Yes	Yes	Yes	100%
The report must include a table summarising the various asset value adjustments	Yes	Yes	No	Yes	75%
The report must include a signed statement that where values are determined in accordance with GAAP, those values have been reviewed by a qualified party	N/A	No	N/A	No	50%
The report must include a signed statement that where values are determined in accordance with the Gas Regulations 1997, the engineer has reviewed the assumptions	Yes	Yes	No	Yes	75%
The report must include a signed statement that explains the tests performed to determine the quantity and physical asset life of assets	Yes	No	No	No	25%

Requirement	GDB		GTB		Overall Compliance
	GasNet	Vector (GDB)	Maui Development	Vector (GTB)	
The report must include a signed statement that the report meets the requirements of Schedule C	Yes	Yes	No	Yes	75%

Note: 'Yes' means that the GPB has complied with the requirements set, 'No' means that the GPB has not complied or partly complied with a specific requirement, and N/A means that the requirement is not applicable to the GPB. In calculating the overall compliance, N/A was considered as compliant.

It can be observed from the table above that the overall compliance for most of the requirements is generally high. However, it is worth highlighting that for the requirement in relation to providing a signed statement specifying that values determined in accordance with GAAP have been reviewed by a qualified party as well as that tests were performed by the independent engineer to determine the quantity and physical life of assets, most of the GPBs have failed to comply with these requirements.

The succeeding table provides an overview of a GPB's compliance in terms of Schedule C Table 1 of the Commission's Information Request. Table 1 of the aforementioned request sets out the minimum information requirements for adjustments in relation to the correction of asset register errors.

Table 5: Compliance to Schedule C Table 1 – Correction of Asset Register Errors

Requirement - Correction of Asset Register Errors		GDB		GTB		Overall Compliance
		GasNet	Vector (GDB)	Maui Development	Vector (GTB)	
Included	Description including physical asset life and quantity	No	Yes	No	Yes	50%
	Value of the asset as of the day the asset enters the register	Yes	No	No	No	25%
Excluded	Description and quantity	N/A	Yes	N/A	N/A	100%
	Value of the asset as of the day the asset enters the register	N/A	Yes	N/A	N/A	100%
Value Modified	Description and type of error	Yes	Yes	N/A	Yes	100%
	Value of the asset as of the day the asset entered the register	Yes	No	N/A	No	50%
	Calculation of relevant adjustment	No	No	N/A	No	25%
	Resultant 'modified value' as of the day the asset entered the register	Yes	Yes	N/A	Yes	100%

Note: 'Yes' means that the GPB has complied with the requirements set, 'No' means that the GPB has not complied or partly complied with a specific requirement, and N/A means that the requirement is not applicable to the GPB. In calculating the overall compliance, N/A was considered as compliant.

The table above shows low compliance for GPBs who have proposed adjustments relating to correction of assets omitted in error and correction of assets given an estimation of quantity, age, category or location now known to be incorrect.

It is worth noting that Schedule C 2 (d) of the Commission's Information Request requires GPBs to not only provide the minimum information for each category of asset adjustment presented in the table above, but also to provide additional information to allow a reader of the report to:

1. Understand the data, information, calculations and assumptions employed in respect of each category of asset adjustment;
2. 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
3. To verify the arithmetical accuracy of the asset adjustment calculations.

Details of the compliance review can be found in Appendix B of this report. NCL included comments in Appendix B under the items where a GPB has been found to be not fully compliant.

4. DETAILED REVIEW OF ASSET VALUE ADJUSTMENTS

4.1 INTRODUCTION

This section focuses on the review of the different asset adjustments as they were presented by each GDB or GTB. The specific adjustments reviewed by NCL are listed below:

For GDBs

1. GasNet;
 - a. Asset information improvements.
2. Vector (GDB);
 - a. Asset information improvements;
 - b. Inclusion of the value of intangible assets;
 - c. Optimisation and economic value test adjustments; and
 - d. Adjustment to correct asset ages.

For GTBs

3. Maui Development; and
 - a. Inclusion of spares.
4. Vector (GTB).
 - a. Inclusion of assets omitted in error;
 - b. Adjustment to correct asset ages; and
 - c. Inclusion of the value of intangible assets.

4.2 GASNET

GasNet contracted AECOM New Zealand Limited to prepare the Independent Engineer's Report and from this report, the independent engineer has indicated that due to improvements of the systems used by GasNet in developing the regulatory asset base, a number of assets were found that were previously omitted or incorrectly valued.

The proposed adjustments per class of asset are listed below:

Class of Asset	30 June 2008 – Under NZ IFRS	Proposed Adjustment – Under NZ IFRS
Mains	\$14,986,818	\$507,979
Services	\$5,512,365	-\$275,890
Facilities	\$284,244	-\$29,432
Crossings	Not Included	\$344,846
Others	\$239,387	\$6,260
Network Valves	Not Included	\$96,432
Impairment credit from EV		\$38,423
Totals	\$21,022,814	\$688,618

Source : AECOM Independent Engineer's Report – page 11

The main reason provided in the Independent Engineer's Report for the proposed adjustments is the improvement in the quality of asset information through the implementation of the geographical information system (GIS). With the implementation of the GIS, GasNet not only found assets previously not included, but also identified assets that should not have been included, an example is the "Services" and "Facilities" asset classes as indicated in the table above.

No detailed information on the assets added or removed from the original regulatory asset base was provided as part of the Independent Engineer's Report, for example information on asset quantities. However, NCL notes that the independent engineer had access to substantially more detailed information⁹ and stated that they have reviewed the data provided to them by GasNet and consequently is of the opinion that it is fair and reasonable.

Furthermore, the independent engineer indicated that they have performed spot checks on the replacement cost calculations¹⁰ and also indicated that they are of the view that GasNet used asset lives consistent with those found in its 2008 revaluation for known asset types. For asset types newly included, the independent engineer is of the view that the asset lives is consistent with the GDB IMs.

From the discussions above and the information presented in the Independent Engineer's Report, NCL has the following comments:

1. As indicated in the Independent Engineer's Report, GasNet has proposed the inclusion of the value for the category 'Others' which relates to spares, easements and stores. While it is not a considerable adjustment value compared to the other proposed adjustments, other than the requirements in Schedule C, consistent with the GDB IMs, network spares are assets that should be required in light of the historical reliability and number of the assets held by a GDB to replace any other asset it holds should the other asset be withdrawn from use owing to failure or damage. Therefore, in order to be fully compliant, sufficient information is required to be presented e.g. breakdown of the 'Others' category and a discussion on the determination of the appropriate quantity of spares should be included in the Independent Engineer's Report.
2. As per Schedule C 2 (d) 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 to understand the reasonableness of the proposed adjustment and to verify the arithmetical accuracy of the calculations. NCL also notes that from Table 1, the minimum information requirements for each asset proposed to be included in the regulatory asset base includes the requirement for the provision of the physical asset life and quantity of the asset, and this information was not provided in the Independent Engineer's Report and should be provided for compliance.
3. NCL notes that a value for "Impairment credit from EV" is presented in the tables in Section 3.3, 3.4 and Appendix A of the Independent Engineer's Report; however, it is not clear what such adjustment constitutes. As mentioned in item 2 above, the Independent Engineer's Report must provide the minimum information for each category of asset

⁹ Refer section 2.1 of the Independent Engineer's Report.

¹⁰ NCL notes that by presenting some of the results from the replacement cost rate calculation reviews in the Independent Engineer's Report, the report could have improved the reader's understanding of how the review was performed as per the requirement of Schedule C 2(d).

adjustment corresponding to Table 1 and Schedule C 2 (d) of the Commission's Information Request.

4. Without a breakdown of the calculation to arrive at the value of the asset as of the day the asset enters the register, it is difficult to assess if adjustments were made in relation to optimisation and economic value test. It is worth noting that clause 2.2.1.2 of the GDB IMs does not allow adjustments in relation to optimisation and economic value tests as part of asset adjustment processes that a GDB may elect to undertake. It is therefore recommended that if any such adjustments forms part of GasNet's submission, that the submission be revised to exclude these adjustments.

4.3 VECTOR (GDB)

Vector (GDB) contracted Wilson Cook & Co to review a report¹¹ which provides the discussions prepared by Vector (GDB) around the proposed adjustments as it relates to the asset adjustment process allowed for by the Commission.

The proposed adjustments are listed below:

- a. An increase of \$4.9 million for assets omitted in error;
- b. An increase of \$5.8 million due to improvement of asset information thereby correcting quantity, age, category or location of assets;
- c. A decrease of \$0.04 million for the removal of assets included in error previously;
- d. Inclusion of the value of intangible assets; and
- e. Adjustments to correct asset ages.

It is noted that Schedule C explicitly requires the Independent Engineer's Report to include minimum information for each category of adjustment and requires the report to be sufficient to allow a reader of the report to understand the data, information, calculations and assumptions employed as well as the extent to which professional judgment was exercised by the independent engineer. However, the letter provided by the independent engineer states that the information provided by Vector (GDB) (the table as well as its supporting documents) does not contain enough information for a reader to verify the arithmetical accuracy of the proposed asset adjustment calculations. Furthermore, the independent engineer has stated that they have not attempted to quantify the impact of the exercise of professional judgment in Vector (GDB)'s calculation as the exercise of professional judgment is implicit in the calculations.

In the aforementioned report prepared by Vector (GDB), and consequently reviewed by the independent engineer, Vector (GDB) has indicated that the 2009 disclosed financial statements were based on a Natural Gas Corporation (NGC) valuation produced as at 30 June 2003 which Vector (GDB) claims was flawed. In 2008, Vector (GDB) conducted an internal valuation of the North Island gas distribution network which was performed by applying the Commission's Opening Regulatory Asset Base Valuation Methodology of 15 February 2007. Vector (GDB) is of the view that the 2008 internal valuation is robust due to a number of reasons one of which is the use of a GIS to extract asset information.

¹¹ Adjustments to Gas Distribution Network Optimised Deprival Valuation (as at 30th June 2003), Vector Limited, September 2011.

For purposes of identifying proposed adjustments, as it relates to this adjustment process, Vector (GDB) compared the 2003 asset register with that of 2008 from which adjustments were identified as it applies to assets as at 2003. Vector (GDB) applied the same methodologies and input assumptions as it was applied in 2003, except for new asset categories in which case the same approach used to value the Auckland Gas Distribution for the Gas Final Authorisation of 2005 was applied.

The succeeding subsections discuss each main asset category for which adjustments are proposed by Vector (GDB).

Mains Pipeline

Vector (GDB) has stated that the mains pipelines were given an estimated quantity in 2003. From the 2008 internal valuation, the mains pipeline quantity is now known and results in an increase of 231,025 meters in total as at 2003.

Vector (GDB) has further indicated that the same replacement cost per meter was used for pipelines of similar types. However, for pipeline types for which sizes were not used in 2003 and do not have similar sizes elsewhere in the network, Vector (GDB) used the next size up consistent with clause A.45 (d) of the ODV handbook¹².

Even though it is clear that Vector (GDB) used updated information to develop their latest valuation (based on the register produced for the 2008 internal valuation) and compared the results with the valuation performed in 2003, the information presented only provides insight into the quantity differences per material type for the two valuations. The requirements set by the Commission indicates that sufficient information is to be provided for the reader of the Independent Engineer's Report to be able to understand the data, information, calculations and assumptions employed, as well as to verify the arithmetical accuracy of the asset adjustment calculations. With this in mind, from the information submitted it is not clear what impact asset ages had on the proposed adjustment values when applying these two different registers. NCL is of the opinion that the table on page 4 of Vector (GDB)'s report could be enhanced further to show average asset ages and values (Replacement and Depreciated). Furthermore, as a reader, the overall value of assets that are now included in the 2008 register which were not included in the 2003 register is not clear. From the table provided in page 4 of Vector (GDB)'s report, it would appear that material types LP steel and LP PE were not present in 2003, however it is not clear if this is indeed the only additions not forming part of the 2003 valuation.

Service Connections and Pipes

Vector (GDB) has stated that service connections were originally given a quantity based on assumptions of the average length. From the 2008 internal valuation, the service connection quantity is now known and results in a reduction in overall value of service connections as at 2003.

Vector (GDB) has further stated that the same method of valuing the service connections in the 2003 asset valuation was used for the 2008 asset valuation. The method used in 2003 included using a base cost for the first twenty (20) meters of pipe and adding costs for pipes exceeding the 20 meter length. From this method, Vector (GDB) has stated that they used the

¹² Handbook for Optimised Deprival Valuation of System Fixed Assets of Electricity Lines Businesses, Commerce Commission, 30 August 2004.

same base cost for pipes with lengths shorter than twenty (20) meters and it is unclear why Vector (GDB) did not use the actual pipe lengths to calculate the asset values.

Furthermore, similar to the discussion on mains pipeline in this section, Vector (GDB) used the method applied for electricity lines businesses in that pipes not used in 2003 are valued at the next size up. However, did not explain the potential impact this assumption may have on the valuation.

Lastly, similar to the comments under mains pipeline, it is not clear how asset ages were affected by the use of an updated register (2008 register) and NCL is of the view that this should be made more clear by providing more information to assist the reader of the report to understand the data, information, calculations and assumptions employed as well as to verify the arithmetical accuracy. Also the overall value of assets now added which did not form part of the 2003 register should be made clearer.

Cathodic Protection

Vector (GDB) has stated that in the past, cathodic protection assets were based on an allowance rather than actual information. From the 2008 internal valuation, the cathodic protection quantity is now known and results in an increase in the overall value of cathodic protection as at 2003.

Due to the fact that there are no values for replacement costs for anodes, bonded isolation, monitor wires or rectifiers in the 2003 NGC valuation, Vector (GDB) applied the valuation approach that was used to value the Auckland Gas Distribution Network for the Gas Final Authorisation of 2005. The costs derived from this method were indexed back to 30 June 2003 through the adjustment method used for the Gas Control Model, which uses a weighted average of the sum of the four quarterly CPI indices.

Based on the independent engineer's letter stating that they are satisfied that the assumptions employed by Vector (GDB) as indicated in their report is appropriate and reasonable for purposes of defining the proposed adjustments, NCL assumes that the independent engineer investigated the unit rates (or method of deriving such) in more detail than what was presented in the report and therefore recommends no changes to the proposed adjustment for asset value changes for the cathodic protection asset category.

District Regulating Stations and Gate Stations

Vector (GDB) has stated that district regulating (DRS) and gate station assets were based on estimated quantities in 2003 and that the 2008 internal review now provides more accurate asset information as at 2003. In order to obtain costs, Vector (GDB) performed a mapping exercise between the replacement costs rates used in 2003 versus the more detailed asset information.

It is noted that Vector (GDB) has provided information on quantities and replacement costs. Although these costs are not sufficient for a reader to be able to readily calculate the proposed asset adjustment values, it has assisted in understanding the assumptions employed to arrive at the proposed adjustments. Moreover, the independent engineer has stated that they are satisfied that the assumptions employed by Vector (GDB) as indicated in their report, are appropriate and reasonable for purposes of defining the proposed adjustment. Therefore, NCL recommends no changes to the proposed adjustment for asset value changes for the DRS and gate station asset categories.

Odourisation

The 2003 valuation had two (2) odourisation assets which Vector (GDB) is now proposing to be excluded in the updated 2003 valuation due to it having a value which is not material.

It is recognised that such adjustments will not have a significant impact on the regulatory asset base due to its minimal cost contribution to the overall valuation.

Special Crossings

Vector (GDB) has indicated in its report that there are no special crossing related assets in the 2003 NGC valuation. Furthermore, Vector (GDB) has stated that from the 2008 internal review results, there are now assets under the category of special crossings which should form part of the updated 2003 valuation.

Due to the fact that there was no cost information for special crossing related assets in the 2003 valuation, Vector (GDB) used special crossing costs from the work completed for the 2005 Auckland Gas Distribution Network as the bases for their costs.

NCL notes that the Vector (GDB) report does not contain any replacement cost rates for any of the special crossing related assets and only provides the quantity of crossings per type of pipeline. Furthermore, the report does not sufficiently present all the information to be able to understand how the values were adjusted to 2003 costs. However, based on the independent engineer's letter stating that they are satisfied that the assumptions employed by Vector (GDB) are appropriate and reasonable for purposes of defining the proposed adjustments, NCL recommends no changes to the proposed adjustment for asset value changes for assets relating to special crossings.

Critical Spares

Vector (GDB) has proposed for the inclusion of critical spares in their initial regulatory asset base and has indicated that the value of critical spares has been determined from a register of gas spares compiled in 2008 and the level has been deemed to be the same level of spares that would have been held in 2003. Vector (GDB) has further indicated that to calculate what would have been the value of spares in 2003, an adjustment of -12.6% was applied to the 2008 costs.

From the proposed adjustment of Vector (GDB) in relation to the inclusion of critical spares in their initial regulatory asset base, NCL has the following comments:

1. Given that it is not explicitly presented in the report, NCL has assumed that the -12.6% adjustment relates to indexation.
2. In order to allow a reader to fully understand and verify the accuracy of the adjustment as required for in Schedule C, NCL is of the view that in order to fully comply, Vector (GDB) should include more information on how the appropriate quantity of spares was derived for the 2008 register which forms the basis of the proposed adjustment in 2003.

Pipeline Valves

Vector (GDB) has stated that there were no pipeline valve assets in the 2003 NGC valuation based on the fact that there was no mention of such assets in the 2003 NGC valuation report or any replacement cost information in the draft Ministry of Economic Development (MED) handbook which was used as reference in the 2003 NGC valuation. NCL notes that there is to a certain extent a lack of assurance that the pipeline valve assets do not already form part of the 2003 NGC valuation even though it is not mentioned in the 2003 NGC valuation report.

Due to the lack of information on how these assets were valued in 2003, Vector (GDB) applied the valuation approach that was used to value the Auckland Gas Distribution Network for the Gas Final Authorisation of 2005 and applied indexation to arrive at a value applicable as at 30 June 2003.

It is noted that Vector (GDB) has provided information on quantities and further indicated that the 2005 valve replacement costs were adjusted by CPI movements to arrive at a value applicable at 30 June 2003, although the aforementioned information is not sufficient for a reader to be able to readily calculate the proposed asset adjustment values. Moreover, the independent engineer has stated that they are satisfied that the assumptions employed by Vector (GDB) as indicated in their report, are appropriate and reasonable for purposes of defining the proposed adjustment. Therefore, NCL recommends no changes to the proposed adjustment in relation to pipeline valves.

Intangible assets

The GDB IMs specifies that the GDBs may include in their regulatory asset base intangible assets that are identifiable non-monetary assets. The GDB IMs' definition of an identifiable non-monetary asset is consistent with the meaning under GAAP, and excludes goodwill.

NCL notes that Vector (GDB) has proposed a value of \$1.4 million for the inclusion of intangible assets however has failed to provide sufficient supporting information, therefore making it difficult to assess that the intangible assets proposed by Vector (GDB) are identifiable non-monetary assets.

It is recognised that Vector (GDB) has indicated that the value of the proposed inclusion has been established in accordance with NZ IAS 38 and reviewed by a qualified accountant. However, it is clearly stated in the Commission's Information Request that should a GPB elect to undertake asset adjustments, this should form part of the written Independent Engineer's Report and should comply with the requirements specified in Schedule C. The requirement as per Schedule C also indicates that the independent engineer should state that a separate qualified party reviewed the information not reviewed by them, and that the corresponding value meets the requirements of Schedule C, however; this was also not provided as part of Vector (GDB)'s submission.

Correction of Asset Ages

Vector (GDB) has included in its submission an adjustment to correct asset ages as it was identified that asset ages, and the way these were applied to assets in order to roll forward the original asset valuation, do not correspond with the asset ages and their application to assets in the more detailed asset register. Vector (GDB) has further indicated that all assets in the asset register, apart from special crossings, critical spares, valves and intangible assets (assets identified by Vector (GDB) as 'included'), are affected by an error in asset ages.

It is unclear in the report what tests Vector (GDB) 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 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 satisfy the requirements of Schedule C, and in order to enable a more thorough review and understanding of such correction.

Optimisation and Economic Value Test

NCL notes that adjustments in relation to optimisation and economic value tests have been discussed in Vector (GDB)'s report. However, as per clause 2.2.1.2 of the GDB IMs, such adjustments do not form part of the allowed asset adjustment processes that a GDB may elect to undertake. It is also worth noting that the optimisation and economic value tests have been discussed only for mains pipeline assets; however, it is unclear in the report if there were also adjustments in relation to optimisation and economic value tests applied to other asset categories. It is therefore required that the submission be revised to exclude adjustments in relation to optimisation and economic value tests, given that these adjustments are not allowed for in the GDB IMs.

4.4 MAUI DEVELOPMENT

Maui Development has contracted ITL Engineering to undertake the preparation of an Independent Engineer's Report in relation to their proposed asset adjustments.

The independent engineer presented a discussion on the pipeline emergency spares that is proposed to be included in Maui Development's regulatory asset base.

It is recognised that the independent engineer has presented the proposed replacement cost (including supporting information i.e. quotation from suppliers) for the different equipment proposed to form part of Maui Development's emergency spares. Even so, NCL notes that the independent engineer has neglected to discuss how the quantity of spares was determined and if it is an appropriate level. Moreover, it is worth highlighting that the values presented in the Independent Engineer's Report appear to be presented as at 2011 and it is therefore not clear how the values were adjusted to at the time the assets entered the register (2007 and 2008 based on the submitted Schedule A4).

Since insufficient information was provided, it is not possible for a reader to understand and verify the accuracy of the asset adjustments and it would be prudent to expect Maui Development to provide further information.

Furthermore, NCL notes that Maui Development's submitted Schedule A4 of the Commission's Information Notice Template includes proposed adjustments for compressor upgrades and such adjustment appears to not form part of the Independent Engineer's Report. Since it is clearly stated in the Commission's Information Request that should a GPB elect to undertake asset adjustments, this should form part of the written Independent Engineer's Report and should comply with the requirements specified in Schedule C, NCL recommends that the adjustment forms part of the Independent Engineer's Report for compliance as well as to allow for a more comprehensive review to be undertaken by NCL in relation to the proposed adjustment.

4.5 VECTOR (GTB)

Vector (GTB) contracted Wilson Cook & Co to review a report¹³ which provides the discussions prepared by Vector (GTB) around the proposed adjustments as it relates to the asset adjustment process allowed for by the Commission.

The proposed adjustments are listed below:

- a. An increase of \$6.06 million for assets omitted in error (land and critical spares);
- b. Adjustment to correct asset ages; and
- c. Inclusion of the value of intangible assets and linepack.

The independent engineer has qualified that adjustments in relation to land, linepack, intangible assets, depreciation calculation and rolled-forward amounts have not been reviewed by them as it is a matter outside of their ambit.

Moreover, while Schedule C explicitly requires the Independent Engineer's Report to include minimum information for each category of adjustment and requires the report to be sufficient to allow a reader of the report to understand the data, information, calculations and assumptions employed as well as the extent to which professional judgment was exercised by the independent engineer; the independent engineer has stated that the information provided by Vector (GTB) (the table as well as its supporting documents) does not contain enough information for a reader to verify the arithmetical accuracy of the proposed asset adjustment calculations. Furthermore, the independent engineer has indicated that they have not attempted to quantify the impact of the exercise of professional judgment in Vector (GTB)'s calculation as the exercise of professional judgment is implicit in the calculations.

In the aforementioned report prepared by Vector (GTB), Vector (GTB) has indicated that the most recent revaluation conducted was the NGC valuation produced as at 30 June 2003.

The succeeding subsections discuss each main asset category for which adjustments are proposed by Vector (GTB).

Land at Stations

Vector (GTB) has proposed the inclusion of the value of land at stations in its regulatory asset base and indicated that the land value has been based on government valuations and adjusted for CPI in order to arrive at the values as at 2003.

As per Schedule C 2 (d) 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 to understand the proposed adjustment and 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 information about the proposed adjustment be provided.

¹³ Adjustments to Gas Transmission Network Optimised Deprival Valuation (as at 30th June 2003), Vector Limited, October 2011.

NCL further notes that Vector (GTB) 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) of the Commission's Information Request, NCL is of the view that the proposed adjustment should have been reviewed by an independent qualified party.

Critical Spares

Vector (GTB) has proposed the inclusion of the value of critical spares in its regulatory asset base and indicated that it is not possible to establish the exact list of spares that was held in 2003. From this, the level of critical spares held by Vector (GTB) in 2007 has been deemed to be the same level of spares that would have been held in 2003. In the report, Vector (GTB) has also indicated that to be able to determine the 2003 value of critical spares, the 2007 valuation was divided by a "de-indexing" factor.

NCL notes that Vector (GTB) provided some discussion on what they have considered as spares that should be included in the 2007 valuation, and that the independent engineer has indicated that they are satisfied with the assumptions employed by Vector (GTB).

Linepack

In the report prepared by Vector (GTB) it is indicated that they are proposing the inclusion of the value of linepack in the regulatory asset base amounting to \$1.429 million. NCL notes that the proposed adjustment was neither reviewed by the independent engineer nor by any independent qualified party and therefore NCL recommends that this adjustment not be allowed.

Correction of Asset Ages

Vector (GTB) has identified that the asset ages for all assets except land, critical spares, linepack and intangible assets (assets identified by Vector (GTB) as 'included'), and the way these were applied to assets in order to roll forward the original asset valuation, do not correspond with the asset ages and their application to assets in the more detailed register. Vector (GTB) has indicated that the proposed age corrections do not affect the values in the year they enter the regulatory asset base but affects the depreciation values in subsequent years. However, it is unclear in the report what tests Vector (GTB) 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 has not reviewed this proposed 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 satisfy the requirements of Schedule C, and in order to enable a more thorough review and understanding of such correction.

Intangible assets

NCL notes that Vector (GTB) has proposed a value of \$10.4 million for the inclusion of intangible assets. Vector (GTB) has indicated in their report that the independent engineer has not reviewed this inclusion but the proposed adjustment has been established in accordance with NZ IAS 38 and reviewed by a qualified accountant. NCL further notes that Vector (GTB) submitted an additional report prepared by Sinclair Knight Merz (SKM) who has conducted the

review of intangible assets for this particular case. NCL has assumed that the review conducted for intangible assets referred to in Vector (GTB)'s report is the review undertaken by SKM.

In the report provided by SKM, the following intangible assets have been identified:

1. Technical knowledge held in engineering standards, asset management plans and operating standards; and
2. Intellectual property comprising of the building of a database for simulation model, pricing billing models, safety operating rules and vendor contracts.

It is recognised that the SKM report includes a discussion on the valuation methodology applied to intangible assets and the resulting proposed values as at June 2009 and as at the day the asset entered the register (including the values necessary to be able to calculate the proposed adjustment and a discussion sufficient to allow a reader to understand the calculations).

It is worth noting that the SKM report indicates that majority of the intangible assets were acquired as part of the purchase of the NGC. From this statement it can be assumed that Vector (GTB)'s proposed inclusion of intangible assets also includes items that were internally generated. Given this, NCL is of the view that confirmation is required indicating that the value of intangible assets have either not been taken up in the values of other assets allocated to the acquisition price; or that the costs have not been already disclosed as operational expenditure under previous electricity information disclosures.

4.6 CONCLUSION

NCL notes that specific issues were identified during the review of the Independent Engineers Reports submitted by the GPBs as presented in this section. The specific issues identified were communicated to each of the GPBs and in order to assist in addressing the issues, the GPBs have provided additional information. The outcome of the addendum review is discussed in the subsequent section. The tables in Appendix B presents where the GPB has been assessed to be compliant or non-compliant in the initial review as well as the results of the compliance assessment after the review of subsequent submitted information from GPBs (addendum review).

5. ADDENDUM REVIEW

In June 2012, the Commission issued a Paper¹⁴ informing the GPBs of the updated process on the regulatory base adjustments and that some outstanding queries were identified and the GPBs will be contacted in relation to these queries. In July 2012, NCL on behalf of the Commission forwarded the queries in relation to the review of the GPBs' submissions in September 2011 (submissions were in the form of an Independent Engineer's Report), on the adjustments to the optimised deprival valuation. NCL's review of the Independent Engineers' Reports is presented in Sections 3 and 4 of this report. The additional information provided by the GPBs following the queries issued in July 2012, including the addendum to GasNet's Independent Engineer's Report as well as Vector's Independent Engineer's Report on the line pack adjustment dated 30 January 2013, were reviewed by NCL and the results of the compliance assessment are summarised in the tables below.

Table 6: Addendum Review – General Compliance to Schedule C Requirements

Requirement	GDB		GTB		Overall Compliance
	GasNet	Vector (GDB)	Maui Development	Vector (GTB)	
The report must be completed by an 'engineer'	Yes	Yes	Yes	Yes	100%
The report must be in writing and accessible in electronic format	Yes	Yes	Yes	Yes	100%
The report must include a copy of the written instructions to the engineer	Yes	Yes	Yes	Yes	100%
The report must include a table summarising the various asset value adjustments	Yes	Yes	Yes	Yes	100%
The report must include a signed statement that where values are determined in accordance with GAAP, those values have been reviewed by a qualified party	N/A	Yes	N/A	No	75% ¹⁵
The report must include a signed statement that where values are determined in accordance with the Gas Regulations 1997, the engineer has reviewed the assumptions	Yes	Yes	Yes	Yes	100%
The report must include a signed statement that explains the tests performed to determine the quantity and physical asset life of assets	Yes	Yes	Yes	Yes	100%
The report must include a signed statement that the report meets the requirements of Schedule C	Yes	Yes	Yes	Yes	100%

Note: 'Yes' means that the GPB has complied with the requirements set, 'No' means that the GPB has not complied or partly complied with a specific requirement, and N/A means that the requirement is not applicable to the GPB. In calculating the overall compliance, N/A was considered as compliant.

¹⁴ Process Update – Default Price-Quality Paths for Electricity Distribution and Gas Pipeline Services, Commerce Commission, 19 June 2012.

¹⁵ The non-compliance assessment relates to the GPB's proposed adjustment in relation to land assets.

As can be seen from the table above, after the submission of additional information, the results from NCL's assessment show that most of the GPBs have now fully complied with the general information requirements set out in Schedule C. It is worth noting that the compliance assessment above excludes proposed adjustments that are not specifically allowed for under clause 2.2.1.2 of the GDB and GTB IMs, as well as proposed adjustments that were not reviewed by an independent engineer which is a foremost requirement in the Commission's Information Request.

The succeeding table presents the results from NCL's assessment of the GPBs' compliance with the minimum information requirements set out in Schedule C Table 1. It should be noted that similar to the assessment presented in the table above, the compliance assessment below is limited to proposed adjustments allowed for under clause 2.2.1.2 of the GDB and GTB IMs, as well as proposed adjustments meeting the foremost requirement in the Commission's Information Request that expert opinions and supporting information in the form of an independent engineer's report have to be provided for an asset adjustment process that a GPB has elected to undertake.

Table 7: Compliance to Schedule C Table 1 – Correction of Asset Register Errors

Requirement - Correction of Asset Register Errors		GDB		GTB		Overall Compliance
		GasNet	Vector (GDB)	Maui Development	Vector (GTB)	
Included	Description including physical asset life and quantity	Yes	Yes	Yes	Yes	100%
	Value of the asset as of the day the asset enters the register	Yes	Yes	Yes	Yes	100%
Excluded	Description and quantity	N/A	Yes	N/A	N/A	100%
	Value of the asset as of the day the asset enters the register	N/A	Yes	N/A	N/A	100%
Value Modified	Description and type of error	Yes	Yes	N/A	Yes	100%
	Value of the asset as of the day the asset entered the register	Yes	Yes	N/A	N/A	100%
	Calculation of relevant adjustment	Yes	Yes	N/A	Yes	100%
	Resultant 'modified value' as of the day the asset entered the register	Yes	Yes	N/A	N/A	100%

Note: 'Yes' means that the GPB has complied with the requirements set, 'No' means that the GPB has not complied or partly complied with a specific requirement, and N/A means that the requirement is not applicable to the GPB. In calculating the overall compliance, N/A was considered as compliant.

The table above shows that from the additional information provided by the GPBs, NCL concludes that the GPBs have now complied with all of the specific minimum information requirements set out in Schedule C Table 1.

The tables for each GPB in Appendix B have also been updated to include the results of this review of additional information for compliance with both general and specific requirements of Schedule C.

Appendix A of this report presents the GPBs' proposed value adjustments to their regulatory asset base as well as NCL's recommended value adjustments based on the review of the Independent Engineers' Reports and subsequent additional information provided. In summary, NCL has recommended the following adjustments¹⁶:

GDBs

1. A value for 'Impairment credit from EV' has been included in GasNet's proposed asset value adjustments. The adjustment pertains to including 'add-ons' where the asset had some remaining economic value. NCL notes that clause 2.2.1.2 of the GDB IMs does not allow adjustments in relation to optimisation and economic value tests as part of asset adjustment processes that a GDB may elect to undertake. It is therefore recommended such adjustment amounting to \$38,423 be excluded from GasNet's total proposed asset value adjustment.
2. In response to the discussions with Vector (GDB) in relation to their submission on intangible assets, Vector (GDB) provided supplemental information on the rationale for the approach of valuing the assets on a cost to re-create basis. Vector (GDB) has also indicated that out of the \$1.44 million of intangible assets proposed to be included in the regulatory asset base, \$0.7 million relates to internally generated intangible assets.

In subsequent submissions, Vector (GDB) also provided a certification from KPMG on the treatment of Vector (GDB)'s intangible assets. In the certification, KPMG has indicated that they consider only the acquired intangible assets amounting to \$0.8 million have achieved the recognition criteria of IAS 38. In relation to Vector (GDB)'s approach of valuing the assets on a cost to re-create basis, KPMG has also indicated that given that the intangible assets were acquired from NGC, the costs of the assets should be the fair value. KPMG further indicated that if an active market does not exist, other techniques such as the cost to replace (or cost to re-create) can be employed.

Other issues were identified following discussions in relation to Vector (GDB)'s supplementary submissions including confirmation that for acquired intangible assets, that the values have not been taken up in the values of other assets allocated to the acquisition price; and for internally generated assets, that the costs have not been already disclosed as operational expenditure under previous electricity information disclosures. Subsequently, Vector (GDB) confirmed that the values in relation to acquired intangible assets have not been taken up in the values of other assets allocated to the acquisition price; however, has not provided its confirmation that the costs for internally generated assets have not been already disclosed as operational expenditure under previous electricity information disclosures.

Given that Vector (GDB) has only provided a certification for the acquired intangible assets amounting to \$0.8 million, and that Vector (GDB) has not provided its confirmation that the internally generated assets have not been already disclosed as operational expenditure under previous electricity information disclosures, NCL is of the opinion that

¹⁶ The

only the amount of \$0.8 million complies with the requirements of Schedule C of the Commission's Information Request. NCL therefore recommends that only \$0.8 million be allowed to be included in Vector (GDB)'s regulatory asset base.

3. Vector (GDB) has included in their proposal for the modification of the values of specific asset categories, an adjustment which includes employing the same optimisation and economic value tests used in the 2003 NGC valuation.

In relation to optimisation, the reapplication of the optimisation resulted in a decrease in the total optimisation value applied to the assets from \$4.327 million to \$3.791 million. In relation to the economic value tests, where the ODRC was greater than the economic value, the economic value was adjusted so that the optimised deprival value was equal to the economic value. Such adjustment resulted to an increase in the economic value from \$2.8 million to \$4.9 million.

NCL notes that as per clause 2.2.1.2 of the GDB IMs, optimisation and economic value tests do not form part of the allowed asset adjustment processes that a GDB may elect to undertake. NCL therefore has recommended in its draft review report dated October 2012 that such adjustments not be allowed.

From further discussions and clarifications provided by Vector, it became clear that even with the change in economic value, the optimised deprival value did not change which indicates that there is no real adjustment emanating from the economic value test. From this, NCL recommends no change to the proposed values as a consequence of the reapplication of the economic value test.

In relation to the proposed optimisation adjustment, we have compared the EDB and GPB IMs and we note that in relation to optimisation, the EDB IMs only allows an EDB to re-apply the optimisation previously applied in the ODV valuation. A similar adjustment is what is being proposed by Vector (GDB) for optimisation which the GPB IMs does not specifically include as adjustments that a GPB may elect to undertake. It is our viewpoint that as a consequence of including assets omitted in error, excluding assets included in error, and modifying the values, it is reasonable that the same optimisation should be reapplied to the ODV valuation.

From the above, it is difficult to make a recommendation that seems fair from an engineering viewpoint but may be interpreted as not strictly compliant with the GPB IMs. Given this, we believe the decision remains with the Commission to decide on whether such optimisation adjustment should be allowed. Note that we have not adjusted the proposed value as presented in Appendix A.

GTBs

1. Vector (GTB) has proposed the inclusion of line packs amounting to \$1.429 million. NCL notes that the proposed adjustment was neither reviewed by the independent engineer nor by any independent qualified party and therefore NCL has recommended in its draft review report dated October 2012 that this adjustment not be allowed.

In response to the Commission's letter dated 21 December 2012 which advises Vector of what the Commission has disallowed in Vector's proposed regulatory asset value adjustments, Vector has requested Sinclair Knight Merz (SKM) to provide an Independent Engineer's Report on the inclusion of its line pack asset.

NCL has reviewed the aforementioned Independent Engineer's Report submitted by Vector and based on its review and the recommendation of the Independent Engineer recommends the inclusion of line packs amounting to \$1.429 million in Vector's regulatory asset base.

2. Vector (GTB) has proposed the inclusion of 140 land parcels amounting to \$ 5.073 million. In Vector (GTB)'s original submission, they have indicated that the value of each land parcel was based on most recent government valuation and adjusted by CPI movements.

Following discussions among the Commission, Vector (GTB) and NCL, Vector (GTB) engaged TelferYoung Limited to estimate the land values which Vector (GTB) has proposed to include as part of the regulatory asset base. TelferYoung has estimated in some detail the value of one property located at Mt Wellington, Auckland, which comprises approximately 48% of the total land value of the portfolio. As instructed by Vector (GTB), the balance of the portfolio was estimated by TelferYoung using the council rating valuation and TelferYoung has utilised the QV rural price indexes to adjust the values to 2003. The total value of the land portfolio estimated by TelferYoung is \$3.1 million. It is worth noting that as indicated in TelferYoung's report, the values provided are land value estimates only and not a market valuation. They have further indicated that the estimates are subject in all respects to confirmation by undertaking a full inspection and investigation of the properties and the market evidence, and that this may result in a material adjustment to the indicated estimates.

From the information provided by Vector (GTB), NCL notes that the \$3.1 million land asset value estimated by TelferYoung may materially change if a full market investigation/valuation is conducted. However, in the absence of such full market valuation, NCL proposes that \$3.1 million from the originally proposed \$5.073 million be included in the regulatory asset base at this time.

**APPENDIX A: SUMMARY TABLES FOR PROPOSED ASSET
ADJUSTMENT VALUES**

GPB	Summary of Asset Adjustments (in \$000)														
	2003	NCL Proposed Adjustment	Recommended 2003	Recommended 2004*	2005	NCL Proposed Adjustment	Recommended 2005	Recommended 2006*	2007	NCL Proposed Adjustment	Recommended 2007	2008	NCL Proposed Adjustment	Recommended 2008	Recommended 2009*
GDBs															
GasNet	-	-	-	-	-	-	-	-	-	-	-	1,220	(38)	1,182	(50)
Vector (GDB)	10,660	-	8,024	-	1,442	(642)	800	-	-	-	-	-	-	-	-
GTBs															
Maui Development	-	-	-	-	-	-	-	-	453	-	453	701	-	701	-
Vector (GTB)	6,064	(1,972)	4,092	-	10,413	-	10,413	-	1,429	-	-	-	-	-	-

* NCL proposes no adjustment to values under this year.

The table above is a summary of NCL's proposed asset adjustment values for the GPBs who have elected to undertake an asset adjustment process. The proposed values are the outcome from the reviews undertaken by NCL for the Commission in relation to the GPBs' Independent Engineers' Reports and subsequent additional information provided. Details of the proposed values as summarised above are provided in the subsequent tables.

The subsequent tables are presented in the following order:

GDBs

1. GasNet;
2. Vector (GDB);

GTBs

3. Maui Development; and
4. Vector (GTB).

GASNET								
Asset adjustment process - adjustments (in \$000)		2003	2004	2005	2006	2007	2008	2009
Correct asset register errors	Mains	-	-	-	-	-	508	-
	Services	-	-	-	-	-	(276)	-
	Facilities	-	-	-	-	-	(29)	-
	Crossings	-	-	-	-	-	345	-
	Others	-	-	-	-	-	6	-
	Network valves	-	-	-	-	-	96	-
	Impairment credit for EV	-	-	-	-	-	38	-
Total Adjustments		-	-	-	-	-	688	-
Resubmitted proposed adjustments	Mains	-	-	-	-	-	595	-
	Services	-	-	-	-	-	168	-
	Facilities	-	-	-	-	-	(25)	-
	Crossings	-	-	-	-	-	345	-
	Others	-	-	-	-	-	2	-
	Network valves	-	-	-	-	-	97	-
	Impairment credit for EV	-	-	-	-	-	38	-
	Depreciation	-	-	-	-	-	-	(68)
	Additions	-	-	-	-	-	-	10
	Operational Assets	-	-	-	-	-	-	8
Total Adjustments		-	-	-	-	-	1,220	(50)
NCL Proposed Adjustments		-	-	-	-	-	(38)	-
Total Adjustments (net of NCL proposed adjustments)		-	-	-	-	-	1,182	(50)

VECTOR (GDB)								
Asset adjustment process - adjustments (in \$000)		2003	2004	2005	2006	2007	2008	2009
Correct asset register errors	Special crossings	4,318	-	-	-	-	-	-
	Critical spares	132	-	-	-	-	-	-
	Valves	474	-	-	-	-	-	-
	Cathodic protection	2,035	-	-	-	-	-	-
	Gate station/DRS	(398)	-	-	-	-	-	-
	Mains pipe	6,424	-	-	-	-	-	-
	Services	(2,287)	-	-	-	-	-	-
	Odourisation	(38)	-	-	-	-	-	-
	Intangible assets	-	-	1,442	-	-	-	-
Total Adjustments	10,660	-	1,442	-	-	-	-	
NCL Proposed Adjustments	-	-	(642)	-	-	-	-	
Total Adjustments (net of NCL proposed adjustments)	10,660	-	800	-	-	-	-	

MAUI DEVELOPMENT								
Asset adjustment process - adjustments (in \$000)		2003	2004	2005	2006	2007	2008	2009
Correct asset register errors	Compressor upgrade	-	-	-	-	446	596	-
	Pipeline spares	-	-	-	-	7	105	-
Total Adjustments		-	-	-	-	453	701	-
NCL Proposed Adjustments		-	-	-	-	-	-	-
Total Adjustments (net of NCL proposed adjustments)		-	-	-	-	453	701	-

VECTOR (GTB)								
Asset adjustment process - adjustments (in \$000)		2003	2004	2005	2006	2007	2008	2009
Correct asset register errors	Land	5,073	-	-	-	-	-	-
	Critical spares	991	-	-	-	-	-	-
	Linepack	-	-	-	-	1,429	-	-
	Intangible assets (excluding goodwill)	-	-	10,413	-	-	-	-
Total Adjustments		6,064	-	10,413	-	1,429	-	-
NCL Proposed Adjustments		(1,972)	-	-	-	-	-	-
Total Adjustments (net of NCL proposed adjustments)		4,092	-	10,413	-	1,429	-	-

APPENDIX B: COMPLIANCE TO INFORMATION REQUIREMENTS

This Appendix presents NCL's assessment in relation to the compliance review for the general requirements set in Schedule C. The Appendix consists of two (2) tables for each GPB, of which the first shows the results and comments for the review of the general requirements set out in Schedule C, and the second showing the results and comments for the assessment of requirements set out in Schedule C Table 1. The tables have been updated to include the results of the addendum review conducted by NCL as discussed in Section 5 of this report.

The Appendix provides the review results in the following sequence:

GDBs

1. GasNet;
2. Vector (GDB);

GTBs

3. Maui Development; and
4. Vector (GTB).

GASNET – Schedule C General Requirements

SCHEDULE C INFORMATION REQUIREMENTS	COMPLIANCE (Engineer's Report)		NCL COMMENTS	COMPLIANCE (Re-issued Engineer's Report)		NCL COMMENTS
	YES	NO		YES	NO	
1. The report must be completed by an 'engineer' as defined in clause 1.1.4 of the GDB IMs	✓			✓		
2. The report must:						
a. be in writing and accessible in electronic format;	✓			✓		
b. include a copy of the written instructions provided to the engineer by the GDB;	✓			✓		We note that a copy of the written instructions provided to the engineer by the GDB particularly for the second addendum was not provided; however, NCL assumes that the addendum forms part of the scope of the previous written instructions.
c. include a table summarising the various asset value adjustments and corresponding to Schedule A4 of the Information Disclosure Notice Templates;	✓			✓		
d. provide the minimum information for each category of asset adjustment outlined in Table 1.	See Schedule C Table 1 Review below.					

GASNET – Schedule C General Requirements

SCHEDULE C INFORMATION REQUIREMENTS	COMPLIANCE (Engineer's Report)		NCL COMMENTS	COMPLIANCE (Re-issued Engineer's Report)		NCL COMMENTS
	YES	NO		YES	NO	
e. include a signed statement by the engineer that:						
i. where values are determined in accordance with GAAP; or the general purpose financial statements of GasNet, those values have been supplied or reviewed by an appropriate qualified party;	N/A			N/A		
ii. where values are determined in accordance with a valuation under the Gas (Information Disclosure) Regulations 1997, the engineer has reviewed the assumptions employed to determine the resultant value;	✓			✓		The signed statement indicates that the new model used by the GDB to arrive at the revised values has a higher accuracy and that the independent engineer is confident that thorough processes were applied in testing the new model.
iii. explains the tests performed by the engineer to determine the quantity, and physical asset life of	✓		The signed statement by the independent engineer indicates that it is satisfied that the GDB's model reflects the quantities and physical asset lives of the assets	✓		Although the independent engineer did not explain the specific tests performed to determine quantity and physical

GASNET – Schedule C General Requirements

SCHEDULE C INFORMATION REQUIREMENTS	COMPLIANCE (Engineer's Report)		NCL COMMENTS	COMPLIANCE (Re-issued Engineer's Report)		NCL COMMENTS
	YES	NO		YES	NO	
assets identified as 'included' or 'value modified'; and			<p>although it did not explain the tests performed to determine such quantity and physical asset life of the assets as required in Schedule C.</p> <p>It is however noted that Section 1.4 of the Independent Engineer's Report included a discussion on how data on lengths of mains and services was checked while Section 2.4 of the same report included a discussion on the use of asset lives consistent with the standard physical asset lives in the IM.</p>			asset life of the assets, it has been indicated in the Independent Engineer's Report that spot checks were carried out on the new model to check the consistency of the formulae and the accuracy of the resultant values.
iv. the report meets the requirements of Schedule C.	✓			✓		It is recognised that the certification in the second addendum is in addition to the certification already issued in the original Independent Engineer's Report.

GASNET – Schedule C Table 1 Requirements

CATEGORY OF ADJUSTMENT ¹⁷	DESIGNATED ASSET TYPE	TABLE 1 INFORMATION REQUIREMENTS	COMPLIANCE (Engineer's Report)		NCL COMMENTS	COMPLIANCE (Re-issued Engineer's Report)		NCL COMMENTS
			YES	NO		YES	NO	
1. Correct Asset Register Errors	Included	<ul style="list-style-type: none"> Description including physical asset life and quantity 		✓	The Independent Engineer's Report does not include a description of the physical asset life and quantity of the assets proposed to be included. Moreover, while the report presents the values as of the day it enters the register, it does not show how the proposed values were derived. Thus, it is not possible for a reader of the report to understand the calculations and verify the accuracy of the asset adjustments.	✓		
		<ul style="list-style-type: none"> Value of the asset as of the day the asset enters the register (resultant value from applying the Gas (Information Disclosure) 	✓			✓		

¹⁷ The categories of adjustments presented in the table include only the categories where adjustments have been proposed by the GDB.

GASNET – Schedule C Table 1 Requirements

CATEGORY OF ADJUSTMENT 17	DESIGNATED ASSET TYPE	TABLE 1 INFORMATION REQUIREMENTS	COMPLIANCE (Engineer's Report)		NCL COMMENTS	COMPLIANCE (Re-issued Engineer's Report)		NCL COMMENTS
			YES	NO		YES	NO	
		Regulations 1997)						
	Value modified	<ul style="list-style-type: none"> Description and type of error 	✓			✓		Although the second addendum to the Independent Engineer's Report does not describe the reasons for each error, the report has presented the causes for the value differences of major categories.
		<ul style="list-style-type: none"> Value of each asset as of the day the asset entered the register 	✓			✓		
		<ul style="list-style-type: none"> Calculation of relevant adjustment 		✓	While the report presents the values as of the day it enters the register including the adjustments, it does not show how the proposed adjustments were derived. Thus, it is not possible for a reader of the report to understand the calculations and verify the accuracy of the asset adjustments.	✓		
		<ul style="list-style-type: none"> Resultant 'modified value' 	✓			✓		

GASNET – Schedule C Table 1 Requirements

CATEGORY OF ADJUSTMENT 17	DESIGNATED ASSET TYPE	TABLE 1 INFORMATION REQUIREMENTS	COMPLIANCE (Engineer's Report)		NCL COMMENTS	COMPLIANCE (Re-issued Engineer's Report)		NCL COMMENTS
			YES	NO		YES	NO	
		as of the day the asset entered the register						

VECTOR (GDB) – Schedule C General Requirements

SCHEDULE C INFORMATION REQUIREMENTS	COMPLIANCE (Engineer's Report)		NCL COMMENTS	COMPLIANCE (Re-issued Engineer's Report)		NCL COMMENTS
	YES	NO		YES	NO	
1. The report must be completed by an 'engineer' as defined in clause 1.1.4 of the GDB IMs	✓		NCL notes that even though the independent engineer provided a signed letter presenting a summary of the proposed adjustments, the main report and supporting information were developed by the GDB and not by the independent engineer.	✓		
2. The report must:						
a. be in writing and accessible in electronic format;	✓			✓		
b. include a copy of the written instructions provided to the engineer by the GDB;	✓			✓		
c. include a table summarising the various asset value adjustments and corresponding to Schedule A4 of the Information Disclosure Notice Templates;	✓		It should be noted that the Independent Engineer's Report has presented the asset value adjustments in bullet points and not in tabular form. However, the required table can be found as an attachment to the Independent Engineer's Report, and such attachment was prepared by the GDB.	✓		
d. provide the minimum information for each category of asset adjustment outlined in Table 1.	See Schedule C Table 1 Review below.					

VECTOR (GDB) – Schedule C General Requirements

SCHEDULE C INFORMATION REQUIREMENTS	COMPLIANCE (Engineer's Report)		NCL COMMENTS	COMPLIANCE (Re-issued Engineer's Report)		NCL COMMENTS
	YES	NO		YES	NO	
e. include a signed statement by the engineer that:						
i. where values are determined in accordance with GAAP; or the general purpose financial statements of GasNet, those values have been supplied or reviewed by an appropriate qualified party;		✓	In the signed statement, the independent engineer has indicated that for values determined in accordance with GAAP, these have not been reviewed and covered in the independent engineer's opinion. It is however required in Schedule C that even though the independent engineer has not reviewed such values, it has to certify that such values have been supplied or reviewed by an appropriate qualified party.	✓		
ii. where values are determined in accordance with a valuation under the Gas (Information Disclosure) Regulations 1997, the engineer has reviewed the assumptions employed to determine the resultant value;	✓			✓		
iii. explains the tests performed by the		✓	The signed statement by the independent engineer did not	✓		The GDB has indicated that the 2008 register was

VECTOR (GDB) – Schedule C General Requirements

SCHEDULE C INFORMATION REQUIREMENTS	COMPLIANCE (Engineer's Report)		NCL COMMENTS	COMPLIANCE (Re-issued Engineer's Report)		NCL COMMENTS
	YES	NO		YES	NO	
engineer to determine the quantity, and physical asset life of assets identified as 'included' or 'value modified'; and			specifically include an explanation on the tests performed by the independent engineer to determine the quantity and physical asset life of the assets as required in Schedule C.			reviewed by PWC in June 2009. Moreover, a review of the adjusted asset information was performed by KPMG which included sample testing of individual asset data tracing back to source systems and sample testing post 2003 additions. NCL has relied on the GDB's statement that such required tests were conducted by PWC and KPMG.
iv. the report meets the requirements of Schedule C.	✓			✓		

VECTOR (GDB) – Schedule C Table 1 Requirements

CATEGORY OF ADJUSTMENT ¹⁸	DESIGNATED ASSET TYPE	TABLE 1 INFORMATION REQUIREMENTS	COMPLIANCE (Engineer's Report)		NCL COMMENTS	COMPLIANCE (Re-issued Engineer's Report)		NCL COMMENTS
			YES	NO		YES	NO	
1. Correct Asset Register Errors	Included	<ul style="list-style-type: none"> Description including physical asset life and quantity 	✓		While the GDB's report does not include a description of the physical asset lives of all the assets proposed to be included, it is noted that the independent engineer has indicated that they have found the GDB's data and assumptions as reasonable for the purpose of defining the adjustments.	✓		
		<ul style="list-style-type: none"> Value of the asset as of the day the asset enters the register (resultant value from applying the Gas (Information Disclosure) Regulations 1997) 		✓	The GDB's report includes a description of the standard asset lives and quantities proposed to be included as well as some discussion on how the calculations were done. However, for assets omitted in error and proposed by the GDB to be included, the report does not adequately present all the necessary information (e.g. quantity of critical spares, etc.) to be able for a reader to fully understand how the	✓		

¹⁸ The categories of adjustments presented in the table include only the categories where adjustments have been proposed by the GDB.

VECTOR (GDB) – Schedule C Table 1 Requirements

CATEGORY OF ADJUSTMENT 18	DESIGNATED ASSET TYPE	TABLE 1 INFORMATION REQUIREMENTS	COMPLIANCE (Engineer's Report)		NCL COMMENTS	COMPLIANCE (Re-issued Engineer's Report)		NCL COMMENTS
			YES	NO		YES	NO	
					proposed values were derived. Thus, it is not possible for a reader to verify the accuracy of the asset adjustments.			
	Excluded	<ul style="list-style-type: none"> Description and quantity 	✓					
		<ul style="list-style-type: none"> Value of the asset as of the day the asset entered the register 	✓					
	Value modified	<ul style="list-style-type: none"> Description and type of error 	✓			✓		
		<ul style="list-style-type: none"> Value of each asset as of the day the asset entered the register 		✓	In relation to the correction of asset ages, NCL notes that only the resultant modified values were provided.	✓		The GDB has provided an independent report from PWC explaining among others, that the proposed correction only affects the depreciation values in subsequent years.
		<ul style="list-style-type: none"> Calculation of relevant adjustment 		✓	NCL notes that the report does not adequately show for all adjustments proposed, how the adjustments were derived.	✓		
		<ul style="list-style-type: none"> Resultant 'modified value' 	✓			✓		

VECTOR (GDB) – Schedule C Table 1 Requirements

CATEGORY OF ADJUSTMENT 18	DESIGNATED ASSET TYPE	TABLE 1 INFORMATION REQUIREMENTS	COMPLIANCE (Engineer's Report)		NCL COMMENTS	COMPLIANCE (Re-issued Engineer's Report)		NCL COMMENTS
			YES	NO		YES	NO	
		as of the day the asset entered the register						

MAUI DEVELOPMENT – Schedule C General Requirements

SCHEDULE C INFORMATION REQUIREMENTS	COMPLIANCE (Engineer's Report)		NCL COMMENTS	COMPLIANCE (Re-issued Engineer's Report)		NCL COMMENTS
	YES	NO		YES	NO	
1. The report must be completed by an 'engineer' as defined in clause 1.1.4 of the GTB IMs	✓			✓		
2. The report must:						
a. be in writing and accessible in electronic format;	✓			✓		
b. include a copy of the written instructions provided to the engineer by the GTB;	✓			✓		
c. include a table summarising the various asset value adjustments and corresponding to Schedule A4 of the Information Disclosure Notice Templates;		✓	It should be noted that the Independent Engineer's Report included some explanation on the asset value adjustments but did not present it in the format required in Schedule A4 of the Information Disclosure Notice Templates. It should be further noted that the values presented in the table that formed part of the report does not correlate with the submitted values in Schedule A4 of the Information Notice Template.	✓		We note that even though the values now proposed in the Independent Review correlates with the values presented in Schedule A4, there is still a slight difference in the value for compressor upgrade in 2007 of \$2,000 which translates to an error of about 0.45%. The value in the template is lower than the value in the report and NCL recommends using the lower value. NCL notes that the report does not include a table

MAUI DEVELOPMENT – Schedule C General Requirements

SCHEDULE C INFORMATION REQUIREMENTS	COMPLIANCE (Engineer's Report)		NCL COMMENTS	COMPLIANCE (Re-issued Engineer's Report)		NCL COMMENTS
	YES	NO		YES	NO	
						similar to Schedule A4, however there is a table showing the values per asset category and year.
d. provide the minimum information for each category of asset adjustment outlined in Table 1.	See Schedule C Table 1 Review below.					
e. include a signed statement by the engineer that:						
i. where values are determined in accordance with GAAP; or the general purpose financial statements of Maui Development, those values have been supplied or reviewed by an appropriate qualified party;	N/A					
ii. where values are determined in accordance with a valuation under the Gas (Information Disclosure) Regulations 1997, the engineer has reviewed		✓	The independent engineer certified that the replacement values of the assets are fair and reasonable but however did not certify that the assumptions employed to arrive at the resultant values are appropriate.	✓		

MAUI DEVELOPMENT – Schedule C General Requirements

SCHEDULE C INFORMATION REQUIREMENTS	COMPLIANCE (Engineer's Report)		NCL COMMENTS	COMPLIANCE (Re-issued Engineer's Report)		NCL COMMENTS
	YES	NO		YES	NO	
the assumptions employed to determine the resultant value;						
iii. explains the tests performed by the engineer to determine the quantity, and physical asset life of assets identified as 'included' or 'value modified'; and		✓	The signed statement by the independent engineer did not specifically include an explanation on the tests performed by the independent engineer to determine the quantity and physical asset life of the assets (where applicable) as required in Schedule C.	✓		The independent engineer has obtained technical data from Vector (GDB) and financial information from MDL and concluded that both the technical and financial background for both the proposed adjustments meet the requirements of Schedule C and Table 1.
iv. the report meets the requirements of Schedule C.		✓	The signed statement did not include a certification that the report meets the requirements of Schedule C.	✓		

MAUI DEVELOPMENT – Schedule C Table 1 Requirements

CATEGORY OF ADJUSTMENT ¹⁹	DESIGNATED ASSET TYPE	TABLE 1 INFORMATION REQUIREMENTS	COMPLIANCE (Engineer's Report)		NCL COMMENTS	COMPLIANCE (Re-issued Engineer's Report)		NCL COMMENTS
			YES	NO		YES	NO	
1. Correct Asset Register Errors	Included	<ul style="list-style-type: none"> Description including physical asset life and quantity 		✓	The Independent Engineer's Report only includes the proposed replacement cost values for pipeline emergency spares. However, it should be noted that the GTB's submitted Schedule A4 of the Information Notice Template includes proposed adjustments for compressor upgrades however it is not clear where these adjustments can be found in the report.	✓		
		<ul style="list-style-type: none"> Value of the asset as of the day the asset enters the register (resultant value from applying the Gas (Information 		✓	The Independent Engineer's Report does not present the values as of the day it enters the register (only total replacement costs as at September 2011) and does not show how the proposed values were	✓		

¹⁹ The categories of adjustments presented in the table include only the categories where adjustments have been proposed by the GTB.

MAUI DEVELOPMENT – Schedule C Table 1 Requirements

CATEGORY OF ADJUSTMENT 19	DESIGNATED ASSET TYPE	TABLE 1 INFORMATION REQUIREMENTS	COMPLIANCE (Engineer's Report)		NCL COMMENTS	COMPLIANCE (Re-issued Engineer's Report)		NCL COMMENTS
			YES	NO		YES	NO	
		Disclosure) Regulations 1997)			derived. Thus, it is not possible for a reader of the report to understand the calculations verify the accuracy of the asset adjustments.			

VECTOR (GTB) – Schedule C General Requirements

SCHEDULE C INFORMATION REQUIREMENTS	COMPLIANCE (Engineer's Report)		NCL COMMENTS	COMPLIANCE (Re-issued Engineer's Report)		NCL COMMENTS
	YES	NO		YES	NO	
1. The report must be completed by an 'engineer' as defined in clause 1.1.4 of the GTB IMs	✓		NCL notes that even though the independent engineer provided a signed letter presenting a summary of the proposed adjustments, the main report and supporting information were developed by the GTB and not by the independent engineer.	✓		
2. The report must:						
a. be in writing and accessible in electronic format;	✓			✓		
b. include a copy of the written instructions provided to the engineer by the GTB;	✓			✓		
c. include a table summarising the various asset value adjustments and corresponding to Schedule A4 of the Information Disclosure Notice Templates;	✓		It should be noted that the Independent Engineer's Report has presented the asset value adjustments in bullet points and not in the format as presented in Schedule A4 of the Information Disclosure Notice Templates. However, the required table can be found as an attachment to the Independent Engineer's Report, and such attachment was prepared by the GTB.	✓		
d. provide the minimum information for each	See Schedule C Table 1 Review below.					

VECTOR (GTB) – Schedule C General Requirements

SCHEDULE C INFORMATION REQUIREMENTS	COMPLIANCE (Engineer's Report)		NCL COMMENTS	COMPLIANCE (Re-issued Engineer's Report)		NCL COMMENTS
	YES	NO		YES	NO	
category of asset adjustment outlined in Table 1.						
e. include a signed statement by the engineer that:						
v. where values are determined in accordance with GAAP; or the general purpose financial statements of Vector (GTB), those values have been supplied or reviewed by an appropriate qualified party;		✓	As per Schedule C of the Information Request, the independent engineer has to certify that values determined in accordance with GAAP have been supplied or reviewed by an appropriate qualified party. In the signed statement of the independent engineer, it has indicated that for such values these have not been reviewed and covered in their opinion as it is a matter beyond their ambit, it further did not certify that it has been reviewed by a qualified party. These proposed adjustments include line pack, intangible assets, land, depreciation and rolled forward amounts. It is noted that the GTB has submitted another report specifically for intangible assets.		✓	NCL notes that the land asset value estimates provided by TelferYoung has been indicated to not constitute a full valuation and may therefore materially change if a full market investigation/valuation is conducted.
vi. where values are determined in accordance with a	✓			✓		

VECTOR (GTB) – Schedule C General Requirements

SCHEDULE C INFORMATION REQUIREMENTS	COMPLIANCE (Engineer's Report)		NCL COMMENTS	COMPLIANCE (Re-issued Engineer's Report)		NCL COMMENTS
	YES	NO		YES	NO	
valuation under the Gas (Information Disclosure) Regulations 1997, the engineer has reviewed the assumptions employed to determine the resultant value;						
vii. explains the tests performed by the engineer to determine the quantity, and physical asset life of assets identified as 'included' or 'value modified'; and		✓	The signed statement by the independent engineer did not specifically include an explanation on the tests performed by the independent engineer to determine the quantity and physical asset life of the assets as required in Schedule C.	✓		The GTB has indicated that the 2008 register was reviewed by PWC in June 2009. Moreover, a review of the adjusted asset information was performed by KPMG which included sample testing of individual asset data tracing back to source systems and sample testing post 2003 additions. NCL has relied on the GTB's statement that such required tests were conducted by PWC and KPMG.
viii. the report meets the requirements of Schedule C.	✓			✓		

VECTOR (GTB) – Schedule C Table 1 Requirements

CATEGORY OF ADJUSTMENT ²⁰	DESIGNATED ASSET TYPE	TABLE 1 INFORMATION REQUIREMENTS	COMPLIANCE (Engineer's Report)		NCL COMMENTS	COMPLIANCE (Re-issued Engineer's Report)		NCL COMMENTS
			YES	NO		YES	NO	
1. Correct Asset Register Errors	Included	<ul style="list-style-type: none"> Description including physical asset life and quantity 	✓			✓		
		<ul style="list-style-type: none"> Value of the asset as of the day the asset enters the register (resultant value from applying the Gas (Information Disclosure) Regulations 1997) 		✓	It is highlighted that in order for a reader to fully understand how the proposed values were derived, and consequently to verify the accuracy of the asset adjustments, more information such as the breakdown of the land assets, CPI, etc. should have been provided in the report.	✓		
	Value modified	<ul style="list-style-type: none"> Description and type of error 	✓			✓		
		<ul style="list-style-type: none"> Value of each asset as of the day the asset entered the register 		✓	In relation to the correction of asset ages, NCL notes that only resultant modified values were provided.	✓		

²⁰ The categories of adjustments presented in the table include only the categories where adjustments have been proposed by the GTB.

VECTOR (GTB) – Schedule C Table 1 Requirements

CATEGORY OF ADJUSTMENT 20	DESIGNATED ASSET TYPE	TABLE 1 INFORMATION REQUIREMENTS	COMPLIANCE (Engineer's Report)		NCL COMMENTS	COMPLIANCE (Re-issued Engineer's Report)		NCL COMMENTS
			YES	NO		YES	NO	
		<ul style="list-style-type: none"> Calculation of relevant adjustment 		✓	The adjustment proposed by the GTB relates to the correction of asset ages and sufficient information should be provided in order to enable a more thorough review and understanding of such test and correction.	✓		The GDB has provided an independent report from PWC explaining among others, that the proposed correction only affects the depreciation values in subsequent years.
		<ul style="list-style-type: none"> Resultant 'modified value' as of the day the asset entered the register 	✓			✓		