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Independent Assurance Report

To: The Directors of Transpower New Zealand Limited

Introduction

Transpower is required to calculate and publish Transmission Charges for each pricing year in accordance with the Transmission Pricing Methodology set out in Schedule 12.4 of the Electricity Industry Participation Code 2010. We have been engaged to perform a reasonable assurance engagement on the calculation of the Transmission charges for the 2013/14 pricing year (covering the period from 1 April 2013 to 31 March 2014).

Directors Responsibilities

The Directors are solely responsible for the calculation of Transmission Charges in accordance with the Transmission Pricing Methodology. They have delegated this responsibility to management. This responsibility includes the maintenance and integrity of underlying records, models and application systems supporting the calculation of Transmission Charges.

Accountants' Responsibilities

Our responsibilities are to provide reasonable assurance on whether:

- The calculation of 2013/14 Transmission Charges have been made consistent with the Transmission Pricing Methodology (Schedule 12.4 within the Electricity Industry Participation Code 2010) (the 'TPM') such that any errors or inconsistencies are unlikely to have a material impact on the prices and;
- Supporting processes adopted by Transpower, with respect to these calculations, are robust.

Our engagement has been conducted in accordance with the following Standards:

- International Standard on Assurance Engagements (NZ) 3000 'Assurance Engagements other than audits of reviews of historical financial information' and;
- Standard for Assurance Engagements 3100 'Compliance Engagements'.

We planned and carried out our work to obtain reasonable, rather than absolute, assurance that the Transmission Charges have been calculated in accordance with the Transmission Pricing Methodology.

A reasonable assurance engagement involves performing procedures to obtain sufficient appropriate evidence as to whether the subject matter is prepared in accordance with the criteria. The procedures selected depend on the practitioner's judgement including the assessment of the risks of material non-compliance of the subject matter with the criteria.

This report is provided solely for Transpower New Zealand Limited for the purpose of the Transmission Charge setting process for the 2013/14 pricing year.

Relationship and Interests

We have no relationship with or interests in Transpower New Zealand Limited other than in our capacity as auditors of the transmission prices (per this engagement letter), as advisors in the areas of taxation compliance, in the provision of the independent report on the remainder period draft forecast MARs and in the provision of other assurance, taxation and professional advisory services. We are not aware of any relationships between our firm and Transpower New Zealand Limited that, in our professional judgement, may reasonably be thought to impair our independence.

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Third party use of our assurance report

Our assurance report is intended for the benefit of those to whom it is addressed and their reporting to the Electricity Authority. It should not be used for any other purposes other than for which it was prepared. The assurance engagement was not planned or conducted in contemplation of reliance by any third party or with respect to any specific transaction. Therefore, items of possible interest to a third party were not specifically addressed and matters may exist that would be assessed differently by a third party, possibly in connection with the specific transaction.

Basis of Reasonable Assurance

Our procedures included examining, on a test basis, evidence supporting the calculation of 2013/14 Transmission Charges as advised to customers, examination of internally and externally generated documents and records, interviewing selected personnel and such other procedures as we considered necessary in the circumstances.

Our specific procedures have included:

- Assessing the consistency and robustness of the processes implemented by management to calculate Transmission Charges. Specifically that adequate management controls are in place over:
  - the appropriateness of inputs into the calculation process including the material completeness, accuracy and validity of these inputs
  - the integrity of underlying systems and models used to determine customer specific Transmission Charges including changes made to reflect the requirements of the TPM.
- Recalculating connection charges, interconnection charges and HVDC charges in accordance with the TPM
- Identifying underlying inputs into these charges and reconciling these inputs to underlying application systems and business records of Transpower
- Verifying, on a sample basis, the classification of connection and interconnection assets
- Recalculating, on a sample basis, individual customer Transmission Charges based on the customer specific asset allocation recorded by Transpower.

In performing the above procedures, we have placed reliance on the underlying application systems and business records maintained by Transpower. These include:

Source	Nature of Input
Audited Statutory Financial Statements for the year ending 30 June 2012 and the 2013/14 Revenue Requirement	Assets, liabilities, revenue and expenditure including HVAC and HVDC components.
Financial Management System (FMIS)	Fixed asset replacement costs, types and characteristics (e.g. line lengths).
Maintenance Management System (MMS) as at 30 June 2012	Operating and maintenance costs associated with specific assets.
Meter Data Repository (MDR) system	Anytime maximum injection (AMI), anytime maximum demand (AMD), historical anytime maximum injection (HAMI), regional coincident peak demand (RCPD) quantity information and the Exceptional Operating Circumstances (EOCs).

Source	Nature of Input
Contract Management Information System (CMIS)	Details of customer specific contracts including New Investment Agreements, Notional Embedding Agreements, Input Connection Contracts and Agreements to Alter Grid Assets.
Asset Capability Information System (ACI)	Lines, circuits and span information.
Forecasting model (TM1)	Fixed assets, asset categories, capital expenditure, asset disposals, depreciation calculations and operating costs.
Grid Configuration Register (Zemindar)	Grid and asset / switch configuration information including the allocation of specific assets to locations, between customers and classification of assets as connection / interconnection, injection / offtake.
Technical network diagrams	Network diagrams recording underlying substation and line configuration information and, for each substation, the specific assets located at this substation, together with specific Line and Circuit information.
2012/13 Business Plan as approved by the Board and related EC approvals	Forecast capital movements and expenditure, operating leases.
53ZD Notice, Appendix 3 sourced from the Commerce Commission website	Weighted average cost of capital.

There are a number of areas where the specific requirements of the TPM cannot currently be met by Transpower's systems. As a result, Transpower has performed a number of alternate procedures which have enabled Transpower to calculate prices materially consistent with the TPM:

- The TPM requires that maintenance cost information is sourced from the Maintenance Management System (MMS). MMS is unable to provide maintenance cost information at a level of detail required by the TPM. Transpower have performed this analysis and allocated maintenance costs as part of the pricing process. PwC assessed this process to confirm a reasonable and consistent allocation of maintenance costs has been made.

In applying the Transmission Pricing Methodology, it is necessary to apply certain assumptions and adjustments to inputs from underlying application systems. We note that the TPM allows for some exceptions to the application of the Transmission Charge in a number of instances to reflect the specific requirements of customer contracts or state of assets in the field. These are:

- Paragraph 26 – Exceptions to the Application of the Connection Charge
- Paragraph 34 – Adjustments to AMD, AMI, HAMI and RCPD and calculation of customer charges
- Paragraph 35 – Transmission Alternatives
- Paragraph 36-42 – Prudent Discount Policy
- Overrides to the connection charge for other assets which are not subject to the TPM, such as customer owned assets or assets which are not in service.

In these circumstances, customer specific Transmission Charges will reflect the terms of specific customer contracts (for example New Investment Contract, Input Connection Contract, Notional Embedding Agreement or Prudent Discount Agreements) the current state of the asset, or the application of discretion allowed to Transpower to alter AMI, AMD, HAMI and RCPD quantities.

We do not provide an opinion as to whether charges have individually been completely and correctly calculated and applied for assets or customers which are not subject to the standard TPM, or whether Transpower's discretion in altering AMI, AMD, HAMI and RCPD quantities is justified.

In our view a robust pricing process is one that is documented, repeatable and with appropriate controls to ensure the completeness, accuracy and validity of inputs, calculations and final transmission prices. Documentation provided by Transpower and reviewed by PwC includes:

- An overview of the pricing process, including key inputs, source of inputs, assumptions and adjustments made to determine these inputs with signoffs from key staff responsible for providing these inputs
- A summary of the key controls applied by management, with accompanying signoffs, to provide comfort over the integrity of inputs, supporting models and pricing calculations used to determine customer specific Transmission Charges.

Reasonable assurance

We conclude that:

- Transmission prices set for the 2013/14 pricing year (refer Appendix A) are consistent with the TPM such that these charges have been calculated in all material respects consistent with the Transmission Pricing Methodology included as Schedule 12.4 of the (Electricity Industry Participation Code 2010) (the 'TPM')
- Overall, the process for ensuring consistency and calculation of these prices was robust.

We completed our work for the purposes of this report on 14 November 2012 and our reasonable assurance is expressed as at that date.

PricewaterhouseCoopers
Wellington

14 November 2012
Date

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Appendix A: Key rates and inputs for the 2013/14 pricing year*

Input / Parameter	2013 / 2014

Capacity Levels (kW) – as at 31 August 2012	
Historical Anytime Maximum Injection (HAMI)	3,197
Total Regional Coincident peak Demand (RCPD)	5,780

Recovery Rates		
WACC	Pre-tax (%)	9.99
	Post-tax (%)	7.19
Asset Return Rate (%)		
	RAVconn ($)	550,337,803
	Dconn ($)	32,181,946
	RCconn ($)	1,154,717,299
Interconnection Rate ($/kW)		99.44
HVDC Rate ($/KW)		
Maintenance Return Rates	Substations (%)	2.21
	220 kV tower lines ($/km)	4,877
	All other tower lines ($/km)	5,378
	Pole lines ($/km)	5,593
Injection Overhead Rate (%)		3.53
Operating Recovery Rate ($/switch)		988
Revenue Forecast ($'000)		
Electricity Industry Participation Code		
HVAC		710,561
HVDC		162,482
Notionally Embedded Agreements		5,224
Updated Revenue Forecast		**878,267**

* Based on the customer pricing calculation run as per Zemindar Grid Scenario number 7,595