

# **Transpower Information Disclosure Amendments Determination 2017**

## **NZCC 25**

**The Commission:**

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**Date of decision:**

2 November 2017

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<b>Determination history</b>		
<b>Determination date</b>	<b>Decision number</b>	<b>Determination name</b>
28 February 2014	[2014] NZCC 5	Transpower Information Disclosure Determination 2014
2 November 2017	NZCC 25	Transpower Information Disclosure Amendments Determination 2017

Commerce Commission

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Pursuant to Part 4 of the Commerce Act 1986, the **Commission** makes the following determination:

### **Principal determination amended**

- 1.1 This amendments determination amends the **principal determination**.
- 1.2 Amendments to the body of the **principal determination** are marked as track changes in this amendments determination.

### **Commencement**

2. This amendments determination comes into force on 2 November 2017.

### **Application**

3. This determination applies to **Transpower** in relation to the supply of **electricity lines services**.

### **Interpretation**

4. Unless the context otherwise requires—
  - (a) words appearing in bold type (except for headings) in this determination are defined terms;
  - (b) terms used in this determination that are defined in the **IMs**, but not in this determination have the meaning given in the **IMs**;
  - (c) terms used in this determination that are defined in the **IPP**, but not in this determination or the **IMs** have the meaning given in the **IPP**;
  - (d) terms used in this determination that are defined in the Commerce Act 1986, but not in this determination, in the **IMs**, or in the **IPP**, have the meaning given in the Commerce Act 1986;
  - (e) financial items must be measured and disclosed in accordance with **GAAP**, unless otherwise required by this determination, the **IMs**, or the **IPP**;
  - (f) non-financial items must be measured and disclosed in accordance with standard industry practice unless otherwise required in this determination, the **IMs**, or the **IPP**;
  - (g) an obligation to do something is deemed to include an obligation to cause that thing to be done; and
  - (h) a word which denotes the singular also denotes the plural and vice versa.
5. If there is any inconsistency between the main body of this determination and any attachment or schedule to this determination, the main body of this determination prevails.

6. In this determination—

**annual regulatory report** means the document containing Transpower’s annual compliance monitoring statement and associated information in fulfilment of its reporting requirements under the **IPP determination**

**auditor** means a person who-

- (a) is qualified for appointment as auditor of a company under the Companies Act 1993;
- (b) has no relationship with, or interest in **Transpower** that is likely to involve a conflict of interest;
- (c) has not assisted with the compilation of the **information** or provided advice or opinions (other than in relation to audit reports) on the methodologies or processes used in compiling the **information**; and
- (d) is not associated with nor directed by any person who has provided any such assistance, advice, or opinion.

**Capex IM** means the Re Transpower Capital Expenditure Input Methodology Determination [2012] NZCC 2

**capital contribution** means money or the monetary value of other consideration charged to or received from customers or other parties for the purposes of asset construction or enhancement

**commencement date** means 1 July 2014

**customer** means any generator, distribution business, consumer, or other entity in New Zealand that is connected, or applies to be connected, to the **grid**

**disclosure year** means the 12 month period ending on 30 June of the year the disclosure relates to

**Electricity Industry Participation Code** means the Code made by the Electricity Authority under section 36 of the Electricity Industry Act 2010 or its successor code

**grid** means the fixed assets used or owned by **Transpower** for the purposes of supplying **transmission lines services**

**IMs** means the **Transpower IM** and the **Capex IM** taken together

**information** means the information required to be **publicly disclosed** under this determination

**interconnection asset report** is the annual disclosure, by **Transpower** of information on the availability and reliability of interconnection assets as defined in the **Electricity Industry Participation Code**  
**investment contract** has the same meaning as **New Investment Contract** in the **Transpower IM**

**IPP** means the individual price-quality path determination applicable to **Transpower**

**opex** means **operating expenditure** as defined in the **Transpower IM**

**other regulated income** means income associated with the supply of **transmission lines services** other than-

- (a) through **prices**;
- (b) investment-related income; or
- (c) **capital contributions**.

**prices** means-

- (a) tariffs, fees or charges; or
- (b) components thereof,

exclusive of GST for the supply of **electricity transmission services**, and includes any discount taken up by a **customer**.

**principal determination** means the *[Transpower Information Disclosure Determination 2014 \[2014\] NZCC 5](#)*, as published on 28 February 2014

**publicly disclose** in relation to any **information**, means to-

- (a) disclose the **information** to the public on the internet at **Transpower's** usual publicly accessible website;
- (b) make copies of the **information** available for inspection by any person during ordinary office hours, at the principal office of **Transpower**;
- (c) within 10 working days of being requested to do so by any person, provide that person with a copy of the **information**, either by post or for collection (during ordinary office hours) from that principal office, whichever the person prefers; and
- (d) within 5 working days after the **information** is disclosed to the public, provide a copy of the information to the **Commission** in the form that it is disclosed to the public.

**special contract term** means-

- (a) a non-**price** term in a contract which materially differs from the terms which the parties in their respective positions would usually include in an arm's length contract; or
- (b) the omission of a material non-**price** term from a contract, when the parties in their respective positions would usually include that term in an arm's length contract; or
- (c) a non-**price** term in a contract resulting from a tender process, which materially varies from, or was not included in, the contractual basis on which the tender proposals were requested or the terms proposed by the lowest qualifying tender from an unrelated party, which credibly could have performed the services.

**system operator services** means the **electricity lines services** performed by **Transpower** as system operator

**transmission lines services** are all **electricity lines services** supplied by **Transpower** excluding **system operator services** and **investment contracts**

**transmission pricing methodology** has the meaning set out in **the Electricity Industry Participation Code**

**Transpower IM** means the Transpower Input Methodologies Determination [2012] NZCC 17.

#### **Applicable input methodologies**

- 7. **Transpower** must apply the requirements set out in the following subparts of the **IMs** where applicable when complying with this determination:
  - 7.1 Subpart 1 of Part 2 of the **Transpower IM** – Cost allocation;
  - 7.2 Subpart 2 of Part 2 of the **Transpower IM** – Asset valuation;
  - 7.3 Subpart 3 of Part 2 of the **Transpower IM** – Treatment of taxation;
  - 7.4 Subpart 4 of Part 2 of the **Transpower IM** – Cost of capital;
  - 7.5 Subpart 2 of Part 3 of the **Capex IM** – Base capex; and
  - 7.6 Subpart 3 of Part 3 of the **Capex IM** – Major capex projects.

#### **Transmission lines services - financial information**

- 8. **Transpower** must **publicly disclose**, in or as a companion to the **annual regulatory report**, by the Friday of the third complete week of October after the end of each **disclosure year**, the following information relating to **transmission lines services** for that **disclosure year**:
  - 8.1 Schedule F1 - Value of the Regulatory Asset Base (RAB roll forward);

- 8.2 Schedule F2- Operating Expenditure (Opex): Actual;
- 8.3 Schedule F3 - Base Capital Expenditure (Base Capex): Actual Commissioned;
- 8.4 Schedule F4 – Comparison of Forecasts for Opex and Base Capex Commissioning;
- 8.5 Schedule F5 - Major Capital Expenditure (Major Capex);
- 8.6 the calculation of the vanilla return on investment (ROI<sub>V</sub>) using the formula and the meanings for the applicable terms specified in clause A1 of Attachment A;
- 8.7 the calculation of the post-tax return on investment (ROI<sub>PT</sub>) using the formula and the meanings for the applicable terms specified in clause A2 of Attachment A;
- 8.8 a comparison of:
  - 8.8.1 the ROI<sub>V</sub> calculated in clause 8.6 with;
  - 8.8.2 the mid-point estimate of vanilla **WACC** calculated in accordance with Subpart 4 of Part 2 of the **Transpower IM** for the **disclosure year**;
  - 8.8.3 the 75th percentile of the vanilla **WACC** range calculated in accordance with Subpart 4 of Part 2 of the **Transpower IM** for the **disclosure year**; and
  - 8.8.4 the vanilla **WACC** rate used for the purposes of the building blocks calculation of **forecast MAR** or **MAR** in the **IPP determination** for the **disclosure year**;
- 8.9 a comparison of:
  - 8.9.1 the ROI<sub>PT</sub> calculated in clause 8.7 with;
  - 8.9.2 the mid-point estimate of post-tax **WACC** calculated in accordance with Subpart 4 of Part 2 of the **Transpower IM** for the **disclosure year**; and
  - 8.9.3 the 75th percentile of the post-tax **WACC** range calculated in accordance with Subpart 4 of Part 2 of the **Transpower IM** for the **disclosure year**;
- 8.10 sufficient explanations for any material differences between:



- 8.10.1 the ROI<sub>v</sub> calculated in clause 8.6 and the 75th percentile of the vanilla **WACC** range in clause 8.8.3;
- 8.10.2 the ROI<sub>v</sub> calculated in clause 8.6 and the vanilla **WACC** rate used for the purposes of the building blocks calculation of **forecast MAR** or **MAR** in clause 8.8.4; and
- 8.10.3 the ROI<sub>PT</sub> calculated in clause 8.7 and the 75th percentile of the post-tax **WACC** range in clause 8.9.3;
- 8.11 the calculation of the regulatory profit/(loss) before tax using the formula and the meanings for the applicable terms specified in clause A3 of Attachment A;
- 8.12 the calculation of the regulatory profit/(loss) before tax including **EV account** movement calculated using the formula and the meanings for the applicable terms specified in clause A4 of Attachment A;
- 8.13 the regulatory profit/(loss) after tax including **EV account** movement calculated using the formula and the meanings for the applicable terms specified in clause A5 of Attachment A;
- 8.14 sufficient explanations for any variances greater than 10 percent or \$10 million between actual and forecast **opex** and actual and forecast **base capex** disaggregated by category;
- 8.15 the **base capex expenditure adjustment** calculated in accordance with clause B1 of Schedule B of the **Capex IM**, including the values for *c*, *e*, *f* and *g*;
- 8.16 The **base capex annual policies and processes adjustment** calculated in accordance with clause B2 of Schedule B of the **Capex IM**, including the values for *h* and *h'*;
- 8.17 the annual **grid output adjustment** calculated in accordance with clause B3 of Schedule B of the **Capex IM**, including the value for *m*;
- 8.18 a list of the **base capex projects** for which **Transpower** has submitted a **major capex proposal** to the **Commission**, and the reduction in the approved **base capex** for the **regulatory period** made in respect of the amount of **major capex**;
- 8.19 for each approved **major capex project** where the last asset to be delivered by the project is not yet **commissioned** or, in the case of **non-transmission solutions**, the **project** has not yet reached its **completion date** as at the end of the **disclosure year**, a sufficient explanation for any variance:
  - 8.19.1 between the updated expected **project cost** and the expected **project cost** specified in the **major capex project** approval where the variance is greater than 10 percent or 10 million dollars; and

- 8.19.2 between the **commissioning date assumption** or **completion date assumption** specified in the **major capex project** approval where the variance is greater than 3 months;
- 8.20 for each **major capex project** that was **commissioned** in the **disclosure year**:
  - 8.20.1 sufficient explanations for any variances between the actual **commissioning dates** of assets associated with the **project** and the forecast **commissioning dates** specified in the **major capex project** approval where the variance is greater than 3 months;
  - 8.20.2 for **non-transmission solutions**, sufficient explanations for any variance from the forecast **recoverable costs** greater than 3 months;
  - 8.20.3 an assessment of the amount of any cost efficiencies achieved in the course of the **project** including explanations of any assumptions made when making the assessment;
  - 8.20.4 the **adjusted major capex allowance** for the project and values for the terms  $o$ ,  $p$ ,  $q$  and  $r$ , calculated in accordance with clause B4(4) of Schedule B of the **Capex IM**;
  - 8.20.5 if applicable, the 'excess amount' for the **project**, as defined in clause B4(3) of Schedule B of the **Capex IM**;
  - 8.20.6 an explanation for any 'excess amount' identified under clause 8.20.5;
  - 8.20.7 an explanation for any amount of **major capex** to which the **major capex overspend adjustment** does not apply, being item  $r$  in clause B4(4) of Schedule B of the **Capex IM**, with the extent of the detail of the explanation being appropriate to the amount of the overspend;
  - 8.20.8 if applicable, the **major capex overspend adjustment** for the **project**, calculated in accordance with clause B4(1) of Schedule B of the **Capex IM**;
  - 8.20.9 the capital expenditure amount for each **project** where the **approved major capex project outputs** were not met, calculated in accordance with the definition of term  $t$  in clause B5(1) of Schedule B of the **Capex IM**;
  - 8.20.10 the **major capex project output adjustment** for the **project**, if applicable, calculated in accordance with clause B5(1) of Schedule B of the **Capex IM**;
  - 8.20.11 sufficient explanations of variances from the **approved major capex project outputs** and the reasons why the **approved major capex project outputs** were not met; and

- 8.20.12 a summary of lessons learned from the **project**;
- 8.21 for all transactions with **related parties**:
  - 8.21.1 the name of the **related party**;
  - 8.21.2 the relationship between the **related party** and **Transpower**;
  - 8.21.3 a description of the transaction;
  - 8.21.4 the value of the transaction; and
  - 8.21.5 the basis used for valuing the transaction.
- 9. **Transpower** must **publicly disclose** by the last working day of December after the end of each **disclosure year**, the following information relating to **transmission lines services**:

Schedule F6 – Regulated Revenue.

#### **Investment contracts**

- 10. **Transpower** must **publicly disclose**, in or as a companion to the **annual regulatory report**, by the Friday of the third complete week of October after the end of each **disclosure year**, for all **investment contracts** entered into where the **transmission pricing methodology** does not apply, the following **information** for that **disclosure year**:
  - 10.1 the name or title of the contract;
  - 10.2 a brief description of the contract;
  - 10.3 the name of the contracting **customer**;
  - 10.4 the date of the contract;
  - 10.5 the electrical capacity of the investment; and
  - 10.6 the estimated build cost.

#### **Transmission lines services - grid management information**

- 11. **Transpower** must **publicly disclose**, in or as a companion to the **annual regulatory report**, by the Friday of the third complete week of October after the end of each **disclosure year**, the following **information** relating to **transmission lines services** for that **disclosure year**:
  - 11.1 Schedule G1 – Transmission System Statistics;
  - 11.2 Schedule G2 - Grid Demand and Injection;

11.3 Schedule G3 - Grid Exit Point (GXP) Connection Capacity and Demand (Actual and Forecast); and

11.4 Schedule G4 - Quality of Supply: Grid Outputs and Performance Measures.

12. **Transpower** must **publicly disclose**, ~~in or as a companion to the **interconnection asset report**~~, by the ~~last working day of December~~**30th of November** after the end of each **disclosure year**, the following **information** relating to **transmission lines services** for that **disclosure year**:

Schedule G5 - Quality of Supply: Interconnection Assets.

13. **Transpower** must **publicly disclose**, in or as a companion to the **integrated transmission plan** for the second **disclosure year** of a **regulatory period** submitted under clause 3.1.1(1) of the **Capex IM** and each **integrated transmission plan** submitted under clause 2.1.1(1) of the **Capex IM**, the following **information** relating to **transmission lines services** supplied by **Transpower** for that **disclosure year**:

13.1 Schedule G6 - Asset Health and Age;

13.2 Schedule G7 - Asset Management Maturity Assessment Tool (AMMAT);

13.3 Schedule G8 - AMMAT Results Summary;

13.4 forecast expenditure for the following categories, including in 5 year intervals from years 10 to 20 and forecast expenditure for greater than 20 years:

13.4.1 HVDC;

13.4.2 power transformers;

13.4.3 high voltage cables;

13.4.4 dynamic reactive support; and

13.4.5 reconductoring;

13.5 all material changes that have occurred since the last published **integrated transmission plan** that will affect the expenditure trends or amounts of expenditure, and sufficient explanations of the reasons for the changes and their likely impact. This includes, but is not limited to changes to:

13.5.1 **Transpower's** strategic direction;

13.5.2 **Transpower's** treasury policy; and

13.5.3 **Transpower's** strategies, policies and processes.

13.6 to meet the requirements of clause 13.2 and 13.3, **Transpower** may **publicly disclose** an asset management audit report, provided the report addresses all

of the assessment areas in the AMMAT, and both the narrative and numerical results are presented in a consistent format throughout the report and in subsequent reports.

### **System operator information**

14. **Transpower** must **publicly disclose**, in or as a companion to the **annual regulatory report**, by the Friday of the third complete week of October after the end of each **disclosure year**, the following **information** relating to **system operator services** supplied by **Transpower** for that **disclosure year**:

Schedule SO1 - System Operator.

### **Audit and certification requirements**

15. Where **Transpower** is required to **publicly disclose** any **information** under sub-clauses 8.1-10.6 and 14, **Transpower** must:

15.1 procure an assurance report by an **auditor** in respect of the **information**, that is prepared in accordance with Standard on Assurance Engagements 3100 – Compliance Engagements (SAE 3100) and International Standard on Assurance Engagements 3000 (ISAE (NZ) 3000) or their successor standards, signed by an **auditor** (either in his or her own name or that of his or her firm), that:

15.1.1 is addressed to the **directors of Transpower** and to the **Commission** as the intended users of the assurance report; and

15.1.2 states:

- (a) that it has been prepared in accordance with Standard on Assurance Engagements 3100 – Compliance Engagements (SAE 3100) and International Standard on Assurance Engagements 3000 (ISAE (NZ) 3000) or their successor standards;
- (b) the work done by the **auditor**;
- (c) the scope and limitations of the assurance engagement;
- (d) the existence of any relationship (other than that of auditor) which the **auditor** has with, or any interests which the **auditor** has in, **Transpower** and/or any of its subsidiaries;
- (e) whether the **auditor** has obtained sufficient recorded information and explanations that he or she required and, if not, the information and explanations not obtained;
- (f) whether in the **auditor's** opinion, as far as appears from the examination, the information used in the preparation of the **information** has been properly extracted from **Transpower's**

accounting and other records, sourced from its financial and non-financial systems;

- (g) whether, in the **auditor's** opinion, as far as appears from an examination of them, proper records to enable the complete and accurate compilation of the **information** required by this determination have been kept by **Transpower** and, if not, the records not so kept; and
- (h) whether in the **auditor's** opinion, **Transpower** has complied, in all material respects, with this determination in preparing the **information**, and, if not, the respects in which it has not done so; and

15.2 **publicly disclose** the assurance report prepared in accordance with sub-clause 15.1 above at the same time as **Transpower publicly discloses** the **information**.

16. Where **Transpower** is required to **publicly disclose** any **information**, **Transpower** must at that time **publicly disclose** a certificate in the form set out in Schedule Cert1 in respect of that **information**, duly signed by no fewer than 2 **directors** of **Transpower**.

#### **Related party transactions**

17. For the purpose of sub-clauses 8.21.4 and 8.21.5 the cost of any **commissioned** asset acquired by **Transpower** from a **related party** must be as determined in accordance with sub-clause 2.2.7(1)(g)-(h) of the **Transpower IM**.

18. For the purpose of sub-clauses 8.21.4 and 8.21.5 the cost of any service or goods (other than a transaction relating to a **commissioned** asset) acquired by **Transpower** from a **related party** must be:

18.1 the directly attributable cost incurred by the **related party** in accordance with the cost allocation process set out in clause 2.1.1 of the **Transpower IM**, provided that the cost incurred by the **related party** in providing the service to **Transpower**:

18.1.1 is fair and reasonable to **Transpower**; and

18.1.2 is substantially the same as the cost incurred by the **related party** in providing the same type of goods or services to unrelated parties; or

18.2 the **price** paid by **Transpower** where:

18.2.1 the **price** paid for all services and goods acquired from that **related party** is less than one percent of **Transpower's** total revenue from the supply of **electricity lines services** for that year; and

- 18.2.2 the total **price** paid for all **related party** transactions is less than five percent of **Transpower's** total revenue from the supply of **electricity lines services** for that year; or
  - 18.3 the **price** paid by **Transpower** to the **related party** following a competitive tender process, provided that-
    - 18.3.1 the **price** is no more than five percent higher than the **price** of the lowest qualifying proposal received;
    - 18.3.2 all relevant tender specifications and material to enable unrelated parties to submit a proposal was provided to unrelated parties, or made available upon the request of unrelated parties;
    - 18.3.3 at least one other qualifying proposal was received; and
    - 18.3.4 the final agreement for the provision of the services or goods by the **related party** does not include any **special contract terms**; or
  - 18.4 the **price** paid by **Transpower**, provided no fewer than 2 **Transpower directors** provide a written certification that they are satisfied that the **price(s)** paid for all such services and, goods acquired from **related parties** reflect the **price(s)** that would be paid in an arm's-length transaction; or
  - 18.5 nil.
19. For the purpose of sub-clauses 8.21.4 and 8.21.5 the **price** received by **Transpower** for any sale or supply of services, goods, or assets to a **related party**, must be one of the following:
- 19.1 if the **related party** is another **regulated supplier** required to **publicly disclose** the **price** paid or cost incurred in accordance with another **Commission** determination, then the **price** received must be that disclosed by the **related party**; or
  - 19.2 the **price** received from the **related party**, provided that no fewer than 2 directors of **Transpower** provide a written certification that they are satisfied that the **price(s)** received for all services, goods, or assets provided to **related parties** reflect the **price(s)** that would be received in an arm's length transaction; or
  - 19.3 at the cost incurred by **Transpower** in providing the service, good, or asset.

## Retention and continuing disclosures

20. **Transpower** must continuously **publicly disclose** the **information** required to be published by this determination for at least 7 years from the date the **information** is first required to be **publicly disclosed**.
21. **Transpower** must retain sufficient information to enable it recreate its **public disclosures** for at least 7 years from the date the **information** is first required to be **publicly disclosed**.

## Exemptions

22. The **Commission** may at any time, by way of written notice to **Transpower**:
  - 22.1 exempt **Transpower** from any or all of the requirements of this determination, for a period and on such terms and conditions as the **Commission** specifies in the notice; and
  - 22.2 amend or revoke any such exemption.
23. Without limiting the generality of clause 22, if **Transpower** considers it necessary or desirable for prudent business reasons to amend or replace an internal methodology or business process such that it is no longer reasonable or possible to meet one or more of the information requirements in this determination;

**Transpower** may explain its reasons for adopting the amended or replacement methodology or process to the **Commission** and apply for an exemption from the relevant requirements under clause 22.1.

## Form of disclosure

24. All financial and numerical **information** required to be **publicly disclosed** must be publicly available in an electronic Microsoft Excel file or similar format capable of a 'copy and paste' function being applied to it.
25. All other **information** must be made publicly available in an electronic Microsoft Word, Microsoft Excel or Adobe PDF file capable of a 'copy and paste' function being applied to it.
26. The disclosure obligations in this determination are the minimum **information** requirements. **Transpower** may explain or make additional disclosures pertaining to **information** disclosed in accordance with this determination.



A handwritten signature in blue ink, appearing to read 'Sue Begg', written in a cursive style.

Sue Begg, *Deputy Chair*

Dated at Wellington this 2nd day of November 2017.

COMMERCE COMMISSION

## Attachment A: Calculation of return on investment and regulatory profit/(loss)

A1 The vanilla return on investment (ROI<sub>v</sub>) is solved in accordance with the following formula:

$$\begin{aligned} \text{opening RAB value} &= \frac{\text{revenue}}{(1 + ROI_v)^{127/365}} \\ &- \sum VCA \\ &- \frac{\text{operating expenditure} + \text{pass-through costs} + \text{recoverable costs}}{(1 + ROI_v)^{182/365}} \\ &- \frac{\text{regulatory tax allowance} - \text{disposed asset proceeds} + \text{TCSD}}{(1 + ROI_v)^{182/365}} \\ &+ \frac{\text{other regulated income}}{(1 + ROI_v)^{182/365}} \\ &+ \frac{\text{adjusted closing RAB value}}{(1 + ROI_v)} \\ &+ \frac{\text{EV account movement}}{(1 + ROI_v)^{182/365}} \end{aligned}$$

where:

$$\begin{aligned} \text{adjusted closing RAB value} &= \text{closing RAB value} \\ &- \text{value of found assets} \\ &+ \text{value of lost assets} \\ &- \text{adjustment to opening RAB value resulting} \\ &\quad \text{from change in cost allocation} \end{aligned}$$

and:

$$\begin{aligned} \text{EV account movement} &= \text{closing EV account balance} \\ &- \text{opening EV account balance} \end{aligned}$$

and:

$$\begin{aligned}
\sum VCA &= \frac{VCA_{JUL}}{(1 + ROI_v)^{16.5/365}} + \frac{VCA_{AUG}}{(1 + ROI_v)^{47.5/365}} \\
&+ \frac{VCA_{SEP}}{(1 + ROI_v)^{77.5/365}} + \frac{VCA_{OCT}}{(1 + ROI_v)^{108.5/365}} \\
&+ \frac{VCA_{NOV}}{(1 + ROI_v)^{138.5/365}} + \frac{VCA_{DEC}}{(1 + ROI_v)^{169.5/365}} \\
&+ \frac{VCA_{JAN}}{(1 + ROI_v)^{200.5/365}} + \frac{VCA_{FEB}}{(1 + ROI_v)^{228.5/365}} \\
&+ \frac{VCA_{MAR}}{(1 + ROI_v)^{259.5/365}} + \frac{VCA_{APR}}{(1 + ROI_v)^{289.5/365}} \\
&+ \frac{VCA_{MAY}}{(1 + ROI_v)^{320.5/365}} + \frac{VCA_{JUN}}{(1 + ROI_v)^{350.5/365}}
\end{aligned}$$

and:

<i>adjustment to opening RAB value resulting from a change in cost</i>	is the total for all assets included in the <b>opening RAB value</b> of the difference between the <b>opening RAB value</b> and the amount calculated by applying to the <b>unallocated opening RAB value</b> the cost allocation
<i>closing EV account balance</i>	means the net sum of the <b>EV accounts</b> at the end of the <b>disclosure year</b> , with a net amount owing to <b>customers</b> being a negative value
<i>disposed asset proceeds</i>	is the total of the proceeds of disposal of <b>disposed assets</b> net of their unaccrued disposal costs in the <b>disclosure year</b>
<i>opening EV account balance</i>	means the net sum of the <b>EV accounts</b> at the start of the <b>disclosure year</b> , with a net amount owing to <b>customers</b> being a negative value
<i>operating expenditure</i>	has the meaning specified in the <b>Transpower IM</b>
<i>other regulated income</i>	is the sum of <b>other regulated income</b> for the <b>disclosure year</b>
<i>pass-through cost</i>	has the meaning specified in the <b>Transpower IM</b>
<i>recoverable cost</i>	has the meaning specified in the <b>Transpower IM</b>
<i>regulatory tax allowance</i>	is the income tax amount determined by applying the <b>tax rules</b> to the <b>regulatory profit/(loss) before tax</b> in accordance with Part 2 Subpart 3 of the <b>Transpower IM</b> for the <b>disclosure year</b>
<i>revenue</i>	is the sum of <b>HVAC transmission revenue</b> plus <b>HVDC transmission revenue</b> plus recovered <b>pass-through costs</b> plus recovered <b>recoverable costs</b> received by Transpower through <b>prices</b> in the <b>pricing year</b>
<i>ROIv</i>	means the vanilla return on investment for the <b>disclosure year</b>
<i>TCSD</i>	is the <b>term credit spread differential allowance</b> as specified in Part 2 Subpart 4 of the <b>IM determination</b> for the <b>disclosure year</b>
<i>value of found assets</i>	is the sum of the values of each <b>found asset</b> as specified in Part 2 Subpart 2 of the <b>Transpower IM</b> for the <b>disclosure year</b>
<i>value of lost assets</i>	is the sum of the values for each <b>lost asset</b> its <b>opening RAB value</b> less its <b>depreciation</b> for the <b>disclosure year</b>
<i>VCA [MONTH]</i>	is the sum of <b>value of commissioned asset</b> for each asset having a <b>commissioning date</b> in the applicable month of the <b>disclosure year</b> .

A2 The post-tax return on investment ( $ROI_{PT}$ ) is calculated in accordance with the following formula:

$$ROI_{PT} = ROI_v - (r_d \times T_c \times L)$$

where:

$ROI_v$	has the meaning used in clause A1
$r_d$	means the cost of debt specified in Part 2 Subpart 4 of the <b>Transpower IM</b>
$T_c$	means the average corporate tax rate specified in Part 2 Subpart 4 of the <b>Transpower IM</b>
$L$	means the leverage percentage specified in Part 2 Subpart 4 of the <b>Transpower IM</b>

A3 The regulatory profit/(loss) before tax is calculated in accordance with the following formula:

$$\begin{aligned} \text{regulatory profit/(loss)} \\ \text{before tax} &= \text{revenue} \\ &+ \text{other regulated income} \\ &- \text{operating expenditure} \\ &- \text{pass-through costs} \\ &- \text{recoverable costs} \\ &- \text{depreciation} \\ &- \text{TCSD} \end{aligned}$$

where:

<i>depreciation</i>	has the meaning specified in the <b>Transpower IM</b>
<i>operating expenditure</i>	has the meaning used in clause A1
<i>other regulated income</i>	has the meaning used in clause A1
<i>pass-through cost</i>	has the meaning used in clause A1
<i>recoverable cost</i>	has the meaning used in clause A1
<i>revenue</i>	has the meaning used in clause A1
<i>TCSD</i>	has the meaning used in clause A1

A4 The regulatory profit/(loss) before tax including EV account movement is calculated in accordance with the following formula:

$$\begin{aligned} \text{regulatory profit/(loss) before} \\ \text{tax including EV account} \\ \text{movement} &= \text{regulatory profit/(loss) before tax} \\ &+ \frac{\text{EV account movement}}{(1 - T_c)} \end{aligned}$$

where:

*T<sub>c</sub>* has the meaning used in clause A2  
*EV account movement* has the meaning used in clause A1  
*regulatory profit/(loss) before tax* is specified in clause A3.

A5 The regulatory profit/(loss) after tax including EV account movement is calculated in accordance with the following formula:

$$\begin{aligned} \text{regulatory profit/(loss) after tax} \\ \text{including EV account} \\ \text{movement} &= \text{regulatory profit/(loss) before tax} \\ &\quad \text{including EV account movement} \\ &- \text{regulatory tax allowance} \\ &- \frac{T_c \times \text{EV account movement}}{(1 - T_c)} \end{aligned}$$

where:

*T<sub>c</sub>* has the meaning used in clause A2  
*EV account movement* has the meaning used in clause A1  
*regulatory profit/(loss) before tax including EV account movement* is specified in clause A4  
*regulatory tax allowance* has the meaning used in clause A1.

## **Schedules F1-6, G1-8 and S01**

For Schedules F1-6, G1-8 and S01, see Microsoft Excel workbook of schedules entitled “Transpower Information Disclosure Schedules” published on 28 February 2014, available at <http://www.comcom.govt.nz/regulated-industries/electricity/electricity-transmission/transpower-information-disclosure/>

## Schedule Cert1: Certification of disclosures

We, [insert full names], being directors of Transpower New Zealand Ltd (Transpower) certify that, having made all reasonable enquiry, to the best of our knowledge and belief-

- (a) the information disclosed in [insert details] for the period [insert disclosure year] and dated [insert date] complies with the requirements of the Transpower Information Disclosure Determination 2014 \*[except in the following respects]; and
- (b) the costs and revenues recorded for related party transactions reasonably reflect the the price(s) that would have been paid or received had these transactions been at arm's length. \*\*

\*[insert description of non-compliance if applicable]

\*\* [delete if inapplicable]

[Signatures of directors]

[Date]



## Appendix: Location of the defined terms used in the determination

Defined Term	Location of Definition
adjusted major capex allowance	Capex IM determination
annual regulatory report	Transpower ID determination
auditor	Transpower IM determination
base capex	Capex IM determination
base capex expenditure adjustment	Capex IM determination
Capex IM	Transpower ID determination
capital contribution	Transpower ID determination
commencement date	Transpower ID determination
Commission	Transpower IM determination
commissioned	Transpower IM determination
commissioning date	Capex IM determination
commissioning date assumption	Capex IM determination
completion date	Capex IM determination
completion date assumption	Capex IM determination
customer	Transpower ID determination
depreciation	Transpower IM determination
director	Capex IM determination
disclosure year	Transpower ID determination
disposed asset	Transpower IM determination
Electricity Industry Participation Code	Transpower ID determination
electricity lines services	Commerce Act

<b>Defined Term</b>	<b>Location of Definition</b>
electricity transmission services	Transpower IM determination
EV account	Transpower IPP determination
forecast MAR	Transpower IM determination
found asset	Transpower IM determination
GAAP	Transpower IM determination
grid	Transpower ID determination
grid output adjustment	Capex IM determination
HVAC transmission revenue	Transpower IPP determination
HVDC transmission revenue	Transpower IPP determination
IMs	Transpower ID determination
information	Transpower ID determination
integrated transmission plan	Capex IM determination
interconnection asset report	Transpower ID determination
investment contract	Transpower ID determination
IPP	Transpower ID determination
IPP determination	Transpower IM determination
lost asset	Transpower IM determination
major capex	Capex IM determination
major capex overspend adjustment	Capex IM determination
major capex project	Capex IM determination
major capex project output adjustment	Capex IM determination
major capex proposal	Capex IM determination
MAR	Transpower IPP determination

<b>Defined Term</b>	<b>Location of Definition</b>
new investment contract	Transpower IM determination
special contract terms	Transpower ID determination
opening RAB value	Transpower IM determination
other regulated income	Transpower ID determination
pass-through costs	Transpower IM determination
policies and processes adjustment	Capex IM determination
prices	Transpower ID determination
pricing year	Transpower IPP determination
project	Capex IM determination
project cost	Capex IM determination
publicly disclose	Transpower ID determination
recoverable cost	Transpower IM determination
regulated supplier	Transpower IM determination
regulatory period	Transpower IM determination
related party	Transpower IM determination
system operator services	Transpower ID determination
tax rules	Transpower IM determination
term credit spread differential allowance	Transpower IM determination
transmission lines services	Transpower ID determination
transmission pricing methodology	Transpower ID determination
Transpower	Transpower IM determination
Transpower IM	Transpower ID determination
unallocated opening RAB value	Transpower IM determination

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Defined Term	Location of Definition
WACC	Transpower IM determination

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