

ISBN: 978-1-991085-10-8

**Decision Series** 

Project no. 17.01/45783

**Public** version

### [Draft] Transpower Input Methodologies (IM Review 2023) Amendment Determination 2023

[2023] NZCC [XX]

The Commission: Vhari McWha

Sue Begg

Dr Derek Johnston Bryan Chapple

Date of decision: [day] [month] 2023

[signature]

[name], Commissioner

Dated at Wellington this [day] of [month] 2023

**COMMERCE COMMISSION** 

Wellington, New Zealand

Determination history		
<b>Determination date</b>	Decision number	Determination name
29 June 2012	[2012] NZCC 17	Transpower Input Methodologies
		Determination ('principal determination')*
28 August 2014	[2014] NZCC 22	Transpower Input Methodologies
		Amendments Determination 2014
26 September 2014	[2014] NZCC 24	Electricity Lines Services Input Methodologies
		Determination Amendment 2014
29 October 2014	[2014] NZCC 27	Electricity Lines Services and Gas Pipeline
		Services Input Methodologies Determination
		Amendment (WACC percentile for price-
		quality regulation) 2014
27 November 2014	[2014] NZCC 32	Incremental Rolling Incentive Scheme Input
		Methodology Amendments Determination
		2014
27 November 2014	[2014] NZCC 34	Transpower Input Methodologies
		Amendments Determination 2014 (No. 2)
11 December 2014	[2014] NZCC 38	Electricity Lines Services and Gas Pipeline
		Services Input Methodologies Determination
		Amendment (WACC percentile for
		information disclosure regulation) 2014
5 February 2015	[2015] NZCC 3	Transpower Input Methodologies
		Amendment Determination 2015
21 October 2015	[2015] NZCC 27	Transpower Input Methodologies
		Amendment Determination 2015 (No. 2)
20 December 2016	[2016] NZCC 27	Transpower Input Methodologies
		Amendments Determination 2016
29 June 2017	[2017] NZCC 17	Transpower Input Methodologies
		Amendment Determination 2017
28 August 2019	[2019] NZCC 10	Transpower Input Methodologies
		Amendments Determination 2019
13 November 2019	[2019] NZCC 16	Transpower Input Methodologies
		Amendments Determination (No. 2) 2019
[day] [month] 2023	[2023] NZCC [XX]	Transpower Input Methodologies (IM Review
		2023) Amendment Determination 2023

<sup>\*</sup> The principal determination re-determined the input methodologies contained in the *Commerce Act* (*Transpower Methodologies*) *Determination 2010* (Commerce Commission Decision No.713, 22 December 2010), as amended by the *Commerce Act* (*Transpower Input Methodologies*) *Amendment Determination* (*No. 1) 2011* (Commerce Commission Decision 736, 1 November 2011). A complete history of determinations relevant to the input methodologies applicable to Transpower is available on the Commission's website.

#### [Drafting notes:

- This determination amends the Transpower Input Methodologies Determination, as previously amended, ('principal determination').
- The included amendments which are secondary legislation are made under the Legislation Act 2019 and Part 4 of the Commerce Act 1986.
- The amendments to the body of the principal determination are marked as track changes in red].

# **Transpower Input Methodologies (IM Review 2023) Amendment Determination 2023**

#### **CONTENTS**

- 1. TITLE
- 2. INTERPRETATION
- 3. DETERMINATION AMENDED
- 4. COMMENCEMENT AND APPLICATION
- 5. PRINCIPAL DETERMINATION AMENDMENTS

determination:	

Under Part 4 of the Commerce Act 1986, the Commerce Commission makes the following

#### 1. TITLE

(a) This determination is the Transpower Input Methodologies (IM Review 2023) Amendment Determination 2023.

#### 2. INTERPRETATION

- (a) In this determination (excluding Attachments A and B), the words or phrases in bold type bear the following meanings:
  - (i) **Act** has the same meaning as in the **principal determination**;
  - (ii) **Commission** has the same meaning as in the **principal determination**;
  - (iii) disclosure year has the same meaning as in the principal determination;
  - (iv) IPP has the same meaning as in the principal determination; and
  - (v) principal determination means the Transpower Input Methodologies Determination [2012] NZCC 17.

#### 3. DETERMINATION AMENDED

(a) This determination amends the **principal determination**.

#### 4. COMMENCEMENT AND APPLICATION

- (a) This determination comes into force on the day after which notice of it is given in the New Zealand Gazette under the Legislation Act 2019 in accordance with s 52W of the Act.
- (b) Without limiting paragraph (a) and subject to paragraph (c), amendments to the **principal determination**:
  - (i) in Part 2 of Attachment B, including any definitions in clause 1.1.4(2) of Attachment B relevant to that Part, apply from the commencement of disclosure year 2026; and
  - (ii) in Part 3 of Attachment B, including any definitions in clause 1.1.4(2) of Attachment B relevant to that Part, apply for an IPP which commences on or after 1 April 2025.
- (c) Without limiting paragraph (a), the following amendments to the **principal determination** in Attachment B apply from the date specified in paragraph (a):
  - (i) the insertion of clause 1.1.4(1)(g) in Attachment B;
  - (ii) the amendments to the definitions of "operating cost" and "pecuniary penalties" in clause 1.1.4(2) of Attachment B, as applied for the purpose of applying Part 2 of Attachment B; and
  - (iii) amendments to clauses 2.2.10(1)(f), 2.2.10(1)(h), 2.2.10(2)-(3) and 2.2.10(5)-(6) of Attachment B, including any definitions in clause 1.1.4(2) of Attachment B relevant to those clauses.
- (d) For the avoidance of doubt, if the **Commission** determines that any forecast values are required to be calculated consistent with Part 3 of Attachment B for the determination of an **IPP** that will be in force from 1 April 2025, the provisions in Part 3, and any applicable definitions in clause 1.1.4(2) of Attachment B will apply as amended by this determination to the setting of the forecast values.

#### 5. PRINCIPAL DETERMINATION AMENDMENTS

- (a) Replace the contents page of the **principal determination** with the contents page in Attachment A.
- (b) The amendments to the body of the **principal determination** are the deletions, substitutions and additions to the attached copy of the **principal determination** that are tracked in red in Attachment B.

### Attachment A:

# TRANSPOWER INPUT METHODOLOGIES (IM REVIEW 2023) AMENDMENT DETERMINATION 2023

#### **CONTENTS**

SCHEDIII F A	STANDARD PHYSICAL ASSET LIVES	71
SUBPART 7	Reconsideration of the individual price-quality path	59
SECTION 3	Transitional provisions	
SECTION 2	Price-quality path amendments and other events	58
SECTION 1	Annual IRIS incentive amounts for operating expenditure	56
SUBPART 6	Incremental rolling incentive scheme	56
SUBPART 5	Cost of capital	
SUBPART 4	Treatment of taxation	52
SUBPART 3	Asset valuation	
SUBPART 2	Cost allocation	51
SUBPART 1	Specification of price	
FAILT 3		
PART 3	INPUT METHODOLOGIES APPLYING TO INDIVIDUAL PRICE-QUAL	ITV DATH
SUBPART 4	Cost of capital	41
SUBPART 3	Treatment of taxation	39
SUBPART 2	Asset valuation	30
SUBPART 1	Cost allocation	
PART 2	INPUT METHODOLOGIES FOR INFORMATION DISCLOSURE	29
PART 1	GENERAL PROVISIONS	9

## Attachment B:

#### PART 1 GENERAL PROVISIONS

#### 1.1.1 Title

This determination is the Transpower Input Methodologies Determination 2010.

#### 1.1.2 Application

- (1) The **input methodologies** in this determination apply to **electricity transmission** services.
- (2) The input methodologies in-
  - (a) Part 2 of this determination apply in relation to information disclosure regulation under Part 4 Subpart 4 of the **Act**; and
  - (b) Part 3 of this determination apply in relation to individual price-quality regulation under Part 4 Subpart 7 of the **Act**.

#### 1.1.3 <u>Commencement Date</u>

This determination comes into force on the day after the date on which notice of it is given in the New Zealand Gazette under section 52W of the **Act**.

#### 1.1.4 Interpretation

- (1) In this determination-
  - (a) unless stated otherwise, references to Parts and Subparts are to named and numbered parts and subparts of the determination;
  - (b) references to Subparts are to subparts within the same part in which the reference is made;
  - (c) unless the context otherwise requires, a word which denotes the singular also denotes the plural and vice versa; and
  - (d) unless stated otherwise, any reference to an allowance, amount, cost, sum or value is a reference to an allowance, amount, cost, sum or value calculated in relation to **Transpower** in respect of a **disclosure year**;
  - (e) unless stated otherwise, any reference to "includes" means "includes, but is not limited to";
  - (f) examples in this determination are for guidance purposes only and do not form part of this determination; and
  - (d)(g) materials incorporated by reference into this determination, including standards promulgated by other bodies, are incorporated in accordance with Schedule 5 of the **Act**.
- (2) In this determination, including in the schedule, the words or phrases in bold type bear the following meanings:

6<u>5</u>7th percentile estimate of WACC

means, for the purpose of-

- (a) Part 2, the 65-7th percentile estimate for the post-tax mid-point estimate of WACC, determined in accordance with clause 2.4.5(4);
- (b) Part 3, in determining the price path for the **IPP**, the 65-7th percentile for the

- vanilla **mid-point estimate of WACC**, determined in accordance with clause 3.5.5(1); and
- (c) Part 3, in reconciling the opening and closing balances of the EV account, the 657<sup>th</sup> percentile for the post-tax midpoint estimate of WACC, determined in accordance with clause 3.5.5(2);

2011 thresholds regulatory asset base

means the regulatory asset base as defined in the **thresholds notice** as of 30 June 2011;

#### Α

Act means the Commerce Act 1986;

actual opex has the meaning specified in clause 3.6.3(8);

adjustment to the opex incentive means the amount calculated in accordance

with clause 3.6.4(1);

<u>allocator type</u> <u>means the basis for the attribution or</u>

allocation of an operating cost or regulated service asset value to electricity transmission services and unregulated services, namely, 'directly attributable', 'causal' or 'proxy';

<u>alternative depreciation method</u> <u>means a method, other than the **standard**</u>

depreciation method, for determining

depreciation and unallocated depreciation, as

determined under clause 3.3.2(1);

**amount carried forward** means, for any given **disclosure year**, the

amount determined in accordance with clause

3.6.3;

<u>anticipatory capacity</u> <u>means, in relation to an **anticipatory**</u>

connection asset, the amount of capacity of

the asset that is not subject to a **new** 

investment contract;

<u>anticipatory connection asset</u> <u>means an asset that has been designated, or a</u>

part of which has been designated, as anticipatory by **Transpower** in accordance with clause 26(1) of Schedule 12.4 of the

code;

<u>arm's-length deduction</u> <u>means, in respect of-</u>

(a) operating costs not directly

attributable, an amount of operating costs incurred by Transpower in the supply of unregulated services that have been recouped in an arm's-length

transaction; and

(b) regulated service asset values not directly attributable, the amount of regulated service asset values in respect of assets used by Transpower in the supply of unregulated services for which a recoupment of capital costs has been made by Transpower in an arm's-length transaction,

that **Transpower** wants to be taken into account for cost allocation purposes;

arm's-length transaction

means a transaction conducted on such terms and conditions as between a willing buyer and a willing seller who are unrelated and are acting independently of each other and pursuing their own best interests;

asset allocator

means a ratio used to allocate regulated service asset values that are not directly attributable and whose quantum is-

(a) based on a causal relationship; or (a)(b) equal to a proxy cost allocator;

auditor

means-

- (a) whilst **Transpower** is a public entity (as defined in s 4 of the Public Audit Act 2001), the Auditor-General; and
- (b) where paragraph (a) does not apply, a **person** who is-
  - (i) qualified for appointment as an auditor of a company under the Companies Act 1993; and
  - (ii) independent;

average debt premium

has the meaning specified in, and is the amount determined in accordance with-

- (a) Part 2, clause 2.4.4(2); and
- (b) Part 3, clause 3.5.4(2);

В

base capex

has the same meaning as defined in the  ${\bf Capex}$ 

base capex allowances

has the same meaning as defined in the **Capex IM**;

base year adjustment to the opex incentive

means the amount calculated in accordance with clause 3.6.4(1);

business day

means any day on which statistics relating to trading in New Zealand government bonds are

published by a financial information service such as Bloomberg or Reuters;

C

cap has the same meaning as defined in the Capex

IM;

Capex IM means the Transpower Capital Expenditure

Input Methodology Determination [2012]

NZCC 2, as amended;

<u>capital costs</u> <u>means return on regulated service asset</u>

values, return of regulated service asset

values, or both;

capital expenditure means costs that-

(a) have been incurred in the acquisition or development of an asset that is, or is intended to be, commissioned; and

(b) are intended to be included in the value of commissioned asset;

catastrophic event has the meaning specified in clause 3.7.41;

<u>causal relationship</u> <u>means, in relation to-</u>

(a) operating costs, a circumstance in which a cost driver leads to an operating cost being incurred during the 18-month period ending on the last day of the disclosure year in respect of which the cost allocation is carried out;

<u>and</u>

(b) regulated service asset values, a
circumstance in which a factor
influences the utilisation of an asset
during the 18-month period ending on
the last day of the disclosure year in
respect of which the asset allocation is

carried out;

**change event** has the meaning specified in clause 3.7.52;

closing ACA capacity means, for a disclosure year,-

(a) the opening ACA capacity for an anticipatory connection asset for the year; less

(b) the amount of any anticipatory capacity
of an anticipatory connection asset
that has, during the year, become
subject to new investment contracts;

means the value determined in accordance with, for the purpose of-

closing RAB value

- (a) Part 2, clause 2.2.3(4); and
- (b) Part 3, clause 2.2.3(4) as modified under clause 3.3.1;

code

has the same meaning as defined in s 5 of the Electricity Industry Act 2010;

collar

has the same meaning as defined in the **Capex IM**;

Commission

has the same meaning as defined in s 2 of the **Act**;

commissioned

means used by **Transpower** to provide **electricity transmission services**, save that in relation to-

- (a) land that is not easement land; or
- (b) an easement,

'commissioned' means acquired by

**Transpower** where –

- (c) the land or easement is base capex, or
- (d) the acquisition was approved by the-
  - (i) Electricity Commission under Part F of the Electricity Governance Rules 2003;
  - (ii) **Commission** under s 54R(3)(b) of the **Act**; or
  - (iii) **Commission** in accordance with an input methodology determined pursuant to s 54S of the **Act**,

and 'commission' shall be construed accordingly;

commissioning

has the same meaning as defined in the code;

commissioning date

means the date that an asset is first

commissioned;

consumer

has the same meaning as defined in s 52C of

the Act;

corporate tax rate

means the rate of income taxation applying to

companies as specified in the tax rules;

cost allocator

means a ratio used to allocate operating costs that are not directly attributable, and whose quantum is-

- (a) based on a causal relationship; or
- (b) equal to a proxy cost allocator;

cost of debt

means the amount specified for  $r_d$  in clause

2.4.1(3);

<u>CPI</u>

means,-

- (a) subject to paragraph (b), the consumer price index stipulated for each quarter in the "All Groups Index SE9A' as published by Statistics New Zealand; and
- (b) in respect of quarters prior to any quarter in which the rate of GST is amended after this determination comes into force, the same index as described in paragraph (a), multiplied by the Reserve Bank of New Zealand's forecast change in that index (expressed as a decimal) arising from the amendment;

customer

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

D

debt issuance costs

means costs associated with the issuance of debt by a supplier (including, but not limited to, arrangement fees, legal fees, brokerage, advertising, credit rating fees, registry costs, listing fees, syndicate fees, trustee fees, facility fees, line fees, roadshow and marketing costs, paying agency fees and any fee or premium incurred in entering into an interest rate or cross-currency derivative);

debt premium

for the purpose of Part 2 or Part 3, has the meaning specified in, and is the amount determined in accordance with, clause 2.4.4(45);

debt premium reference year

means a <u>12-12-</u>month period ending on 31 August;

Example: 'debt premium reference year 2016' means the twelve-12-month period ending 31 August 2016;

decommissioning

has the same meaning as defined in the code;

depreciation

in relation to a **disclosure year**, means the allowance for that **disclosure year** to account for the diminution in an asset's remaining service life potential in the **disclosure year** in question determined in accordance with

clause 2.2.4(2);

<u>directly attributable</u> <u>means, in relation to-</u>

	incurred by Transpower in or in relation to its supply of electricity transmission servces; and (b) regulated service asset values, wholly and solely related to an asset used by Transpower in or in relation to its supply of electricity transmission services;
disclosure year	means 12-12-month period ending on 30 June; Example: 'disclosure year 2012' means 12-12-month period ending on 30 June 2012;
disposed asset	means an asset (other than a lost asset) that, in the disclosure year in question,:  (a) has been sold or transferred; or  (b) has been irrecoverably removed from Transpower's possession without consent, but is not a lost asset; or  (a)(c) is the portion of an anticipatory connection asset that has become subject to a new investment contract in the disclosure year;
document	has the same meaning as defined in s 2 of the <b>Act</b> ;
	E
easement	means a right to use but not possess <b>land</b> belonging to another person or a right to prevent certain uses of another person's <b>land</b> ;
easement land	means land acquired with the intention of- (a) creating an easement in respect of it; and (b) disposing of the land thereafter;
EDB	has the same meaning as defined in the Electricity Distribution Input Methodologies Determination 2012;
E & D base capex project	has the same meaning as defined in the <b>Capex IM</b> ;
E & D non-transmission solution	means an alternative to an investment in the grid, which is used by Transpower to-  (a) avoid or defer transmission investment, where the transmission investment would be an E & D base capex project;

(a) operating costs, wholly and solely

<u>or</u>

(b) manage operational risks due to unavailability of grid assets during an E& D base capex project;

**E & D projects** 

has the meaning specified in clause 3.7.9(1);

**Electricity Authority** 

means the Authority established under s 12 of the Electricity Industry Act 2010;

**Electricity Commission** 

means the same body as the Electricity Governance Board established under s 172M of the Electricity Act 1992 as in force immediately before its substitution by s 14 of the Electricity Amendment Act 2004;

electricity transmission services

has the same meaning as defined in the **Capex IM**:

engineer

means an individual who is-

- (a) a chartered professional engineer as defined in s 6 of the Chartered Professional Engineers of New Zealand Act 2002;
- (b) acting in that professional capacity; and
- (c) independent;

**Enhancement and Development Projects** 

has the meaning specified in clause 3.7.3B(1);

error event

has the meaning specified in clause 3.7.63(1);

EV account

Transpower on an after-tax basis to record each EV account entry not yet returned to or recovered from Transpower's customers, and to record interest calculated on the balance of that account for each disclosure year using the post-tax estimate corresponding to WACC in accordance with clause 3.5.5(2);

**EV** account entry

has the meaning as defined in an **IPP determination**;

excluded asset

means an asset that is-

- (a) not used to **supply electricity transmission services** as on the last day
  of the **disclosure year** 2011; or
- (b) easement land;

F

false or misleading information

finance lease

has the meaning specified in clause 3.7.<u>74(3);</u> has the same meaning as under **GAAP**;

#### fixed life easement

means an easement that-

- (a) is of fixed duration; or
- (b) whilst of indefinite duration, is to be held for a fixed period;

#### foreseeable E & D project

has the meaning specified in clause 3.7.9(3);

Foreseeable Enhancement and Development Project has the meaning specified in clause 3.7.3B(3);

forecast EV adjustment

means an input to the **forecast MAR** calculation specified in an **IPP determination**, for the purpose of returning to or recovering from **customers** the balance of the **EV account** applying to those **customers** which is available to draw down, where this input is calculated in accordance with the formula in clause 3.1.1(5);

**forecast CPI** 

- (a) for a quarter where CPI is available, has the same meaning under paragraph (a) of the 'CPI' definition, excluding any adjustments made under paragraph (b) of that definition arising as a result of an event that occurs after the issue of the Monetary Policy Statement referred to in paragraph (b) below;
- (b) for each later quarter for which a forecast of the change in headline CPI has been included in the Monetary Policy Statement last issued by the Reserve Bank of New Zealand prior to the date for which the vanilla WACC applicable to the relevant regulatory period was determined, means the CPI last applying under paragraph (a) extended by the forecast change in that Monetary Policy Statement; and
- (c) for later quarters, means the forecast
  last applying under paragraph (b)
  adjusted such that an equal increment
  or decrement made to that forecast for
  each of the following three years results
  in the forecast for the last of those
  years being equal to the target midpoint for the change in headline CPI set
  out in the Monetary Policy Statement
  referred to in paragraph (b);

forecast MAR

means, for each **pricing year** in the **regulatory period**, the unsmoothed forecast maximum allowable revenue as determined by the

**Commission** in an **IPP determination**, as amended from time to time in accordance with clause 3.7.115;

forecast SMAR

means, for each **pricing year** in the **regulatory period**, the **forecast MAR** converted to a smoothed price path as determined by the **Commission** using the methodology in clause 3.1.1(3)(b)-(d) and as determined in an **IPP determination**, or as amended from time to time in accordance with an **IPP** 

determination;

forecast opex has the meaning specified in clause 3.6.3(7);

**found asset** has the meaning specified in clause

2.2.<u>11(1)</u>8<del>(1)</del>;

G

GAAP means generally accepted accounting practice

in New Zealand, save that, where the cost of an asset is being determined in accordance with this determination, only the cost model of recognition is applied, insofar as an election may be made between the cost model of recognition and the fair value model of

recognition;

**GPB** means GDB or GTB, as-

(a) 'GDB' is defined in the Gas Distribution Input Methodologies Determination 2012; and

(b) 'GTB' is defined in the Gas Transmission Input Methodologies Determination 2012;

has the same meaning as defined in the  ${\bf Capex}$ 

IM;

has the same meaning as defined in the Capex

IM;

grid output incentive rate has the same meaning as defined in the Capex

IM;

grid reliability standards has the same meaning as defined in the Capex

IM;

has the same meaning as defined in s YA 1 of

the Income Tax Act 2007;

I

<u>GST</u>

grid

grid output

**ID determination** means an information disclosure

determination in relation to **Transpower** made by the **Commission** under s 52P of the

Act;

identifiable non-monetary asset has the same meaning as under GAAP (which,

for the avoidance of doubt, includes right-of-

use assets) and except that it excludes

goodwill);

incremental adjustment term means, for the disclosure year 2016, the

amount determined in accordance with this determination before its amendment by the

Transpower Input Methodologies Amendments Determination 2016;

incremental change means, for a disclosure year of RCP1, the

amount determined for the **disclosure year** in accordance with this determination before its

amendment by the *Transpower Input* 

Methodologies Amendments Determination

2016;

**independent** means neither in a relationship with, nor

having an interest in, **Transpower** that is likely to involve him, her or it in a conflict of interest between his, her or its duties to **Transpower** and his, her or its duties to the **Commission**;

inflation rate has the meaning that was specified in this

determination immediately before its amendment by the *Transpower Input* 

Methodologies Amendments Determination

2016;

initial RAB has the meaning specified in clause 2.2.1;

initial RAB value means value of an asset in the initial RAB

determined in accordance with clause 2.2.2;

**input methodology** has the same meaning as defined in s 52C of

the **Act**;

investment grade credit rated means endorsed with a credit rating by an

established credit rating agency (such as Standard and Poor's) of "investment grade" on that agency's credit rating scale applicable

to long-term investments;

**IPP** means **Transpower's** individual price-quality

path;

**IPP determination** means an individual price-quality

determination applying to **Transpower** made by the **Commission** under s 52P of the **Act**;

<b>IPP</b> revenue growth rate
--------------------------------

means, for each **pricing year** in the **regulatory period**, the annual percentage growth in **forecast SMAR**, as determined in an **IPP determination**;

L

land

excludes-

- (a) buildings; and
- (b) easements;

large buildup in EV account balance lease payment

has the meaning specified in clause 3.7.83A;

has the same meaning as under **GAAP** except that it only applies to lease payments under an **operating lease**;

**leverage** 

means the ratio of debt capital to total capital and, for the purpose of-

- (a) Part 2, is the amount specified in clause 2.4.2(1); and
- (b) Part 3, is the amount specified in clause 3.5.2(1);

levy

means a tax, charge or fee directly imposed by or under legislation-

- (a) on-
  - (i) **Transpower** alone; or
  - (ii) a class of persons (other than the general public or businesses in general) that includes

Transpower; or

(b) in relation to electricity transmission services;

listed project

has the same meaning as defined in the **Capex IM**;

local authority

has the same meaning as defined in s 5(1) of the Local Government Act 2002;

lost asset

means an asset-

- (a) not included in the initial RAB; and
- (b) having, in relation to the disclosure year in question, an unallocated opening RAB value,

but determined by **Transpower** in that **disclosure year** never to have been used to provide **electricity transmission services**;

M

major capex

has the same meaning as defined in the **Capex** 

IM;

major capex allowance

has the same meaning as defined in the **Capex IM**;

major capex project

has the same meaning as defined in the **Capex IM**;

mid-point estimate of WACC

means, for the purpose of-

- (a) Part 2, the mid-point estimate of-
  - (i) vanilla WACC; or
  - (ii) post-tax WACC,

as the case may be, as each is estimated in accordance with clause 2.4.1; and

- (b) Part 3, the mid-point estimate of-
  - (i) vanilla **WACC**; or
  - (ii) post-tax WACC,

as the case may be, as each is estimated in accordance with clause 3.5.1;

multi-rate PIE

has the same meaning as defined in s YA 1 of the Income Tax Act 2007;

#### N

**Nelson-Siegel-Svensson approach** 

network spare

has the meaning specified in clause 2.4.4(89);

means an asset that is held by **Transpower** to replace any other asset it holds should that other asset be withdrawn from use owing to failure or damage;

new investment contract

means a contract for the provision of new electricity transmission services between Transpower and another person in respect of which-

- (a) the other person has agreed in writing (whether in the same contract or not) that the terms and conditions of the contact-
  - (i) are reasonable; or
  - (ii) reflect workable or effective competition for the provision of the electricity transmission services; or
- (b) Transpower demonstrates beyond a reasonable doubt that the terms and conditions of the contract were determined following a process that provided opportunities for-

- (i) **Transpower's** affected customers to make or approve reasonable price-quality trade-offs; and
- (ii) the competitive provision of new electricity transmission services by parties other than Transpower;

#### **NZ IAS 24**

means New Zealand Equivalent to
International Accounting Standard 24, Related
Party Disclosures (NZ IAS 24), issued by the
New Zealand Accounting Standards Board of
the External Reporting Board in November
2009, incorporating amendments to 31
December 2015, under s 24(1)(a) of the
Financial Reporting Act 1993;

#### 0

#### opening ACA capacity

#### means,-

- (a) for the disclosure year in which an anticipatory connection asset is commissioned, the asset's anticipatory capacity on the commissioning date; and
- (b) for a disclosure year thereafter, the asset's closing ACA capacity in the preceding year;

#### opening RAB value

means the value determined in accordance with, for the purpose of-

- (a) Part 2, clause 2.2.3(3); and
- (b) Part 3, clause 2.2.3(3) as modified under clause 3.3.1;

operating lease operating cost

has the same meaning as under GAAP;

means a cost incurred by **Transpower** relating to the **supply** of **electricity transmission services**, and excludes-

- (a) a cost that is treated as a cost of an asset by GAAP;
- (b) amounts that are depreciation, tax, subvention payments, revaluations or an interest expense, in accordance with their meanings under GAAP; and
- (c) debt issuance costs;
- (d) pass-through costs;
- (e) recoverable costs; and
- (e)(f) legal costs incurred in connection with an appeal under s 52Z, s 91, or 97 of the Act; and

<del>(f)</del> (g)	pecuniary	penalties;
ומויי	pecallial y	penance,

operating	expenditure	or <b>opex</b>

#### means-

- (a) except for the purpose of Subpart 6 of Part 3, means operating costs after applying clause 3.2.1(1) plus any lease payments; and
- (b) <u>in any other case, for the purpose of Subpart 6 of Part 3, means operating costs</u> after applying clause 3.2.1(1) plus any lease payments;

opex incentive amount

means the amount determined in accordance with clause 3.6.2;

#### P

pass-through cost

has the meaning specified in clause 3.1.2(1);

pecuniary penalties means fines or penalties imposed-

(a) by a court; or

(b) by any other body with a statutory power to impose such fines or penalties;

person

has the same meaning as defined in s  $\ensuremath{\mathbf{2}}$  of the

Act;

physical asset life

has the meaning specified in clause

2.2.7(1)6(1);

prescribed investor rate

has the same meaning as defined in the Income Tax Act 2007 or any subsequent legislation that supplements or replaces the provisions relating to prescribed investor rate in the Income Tax Act 2007;

pricing year

means a 12 month period ending on 31

March:

programme

has the same meaning as defined in the Capex

IM;

project

has the same meaning as defined in the Capex

IM;

proxy asset allocator

means a ratio-

(a) used to allocate regulated service asset
 values for which a causal relationship
 cannot be established;

(b) whose quantum is based on factors in existence during the 18-month period ending on the last day of the most recent disclosure year in respect of which the proxy allocation is carried out;

- (c) that is consistent with similar ratios
  (both within a disclosure year and from year to year); and
- (d) that is reasonable;

#### proxy cost allocator

#### means a ratio-

- (a) used to allocate operating costs for which a causal relationship cannot be established;
- (b) whose quantum is based on factors in existence during the 18-month period ending on the last day of the most recent disclosure year in respect of which the cost allocation is carried out;
- (c) that is consistent with similar ratios
  (both within a disclosure year and from year to year); and
- (d) that is reasonable;

#### Q

## qualifying debt qualifying issuer

has the meaning specified in clause 2.4.7; means a New Zealand resident limited liability company-

- (a) that-
  - (i) undertakes the majority of its business activities in Australia and New Zealand; or
  - (ii) is part of a corporate group that undertakes the majority of its business activities in Australia and New Zealand;
- (b) that-
  - (i) does not operate predominantly in the banking or finance industries; or
  - (ii) is part of a corporate group that does not operate predominantly in the banking or finance industries; and
- (c) that issues **vanilla NZ\$ denominated bonds** that are publicly traded;

#### qualifying rating

#### means-

(a) a Standard and Poor's long-term credit rating of the specified grade; or

 (b) an equivalent long-term credit rating of another internationally recognised rating agency;

R

**RCP1** means the **regulatory period** commencing on

1 April 2011 and ending on 31 March 2015;

**RCP1 psuedo asset** means the asset calculated in accordance with

clause 2.2.<u>12(2)</u>9(2);

recoverable cost has the meaning specified in clause 3.1.3;

regulated goods or services has the same meaning as defined in s 52C of

the **Act**;

<u>regulated service asset</u> <u>means an asset used by **Transpower** in the</u>

supply of-

(a) electricity transmission services only;

<u>or</u>

(b) electricity transmission services and

one or more unregulated services;

<u>regulated service asset value</u> <u>means, in relation to a regulated service</u>

<u>asset,-</u>

(a) for the **disclosure year** 2011, the asset's

unallocated initial RAB value; and

(b) in any other case, the asset's unallocated closing RAB value;

regulated supplier means a supplier of regulated goods or

services;

regulatory period means the period to which an IPP

determination relates:

<u>regulatory period term</u> <u>means the number of years equal to the</u>

number of years in the relevant regulatory

<u>period;</u>

regulatory tax allowance has the meaning specified in clause 2.3.1(1);

regulatory tax asset value has the meaning specified in clause 2.3.2(1);

related party means-

(a) a person that, if **Transpower** were a

'reporting entity' within the meaning of

NZ IAS 24, would be related to Transpower under the definition of

'related party' in **NZ IAS 24**, other than

as a result of **Transpower** being a

Crown-owned entity-person that, in

accordance with GAAP, is a related to

Transpower, other than as a result of

<b>Transpower</b>	being :	<del>a crown</del>	<del>-owned</del>
entity; or			

(b) any part of Transpower that does not supply electricity transmission services;

#### related party transaction

#### means

- (a) the procurement of an asset, good, or service by Transpower from a related party; or
- (b) the sale or supply of an asset, good, or service by Transpower to a related party;

remaining asset life

means the term remaining of an asset's **physical asset life**, for the purposes of:

- (a) clauses 2.2.4(1)(a) and 2.2.4(2)(a), at the commencement of the **disclosure year** in question; and
- (b) clauses 2.2.4(1)(b) and 2.2.4(2)(b), at the asset's **commissioning date**;

reopener event

revaluation

has the meaning specified in clause 3.7.1(2);

means the amount determined in accordance

with clause 2.2.8(2);

#### revaluation rate

revenue-linked grid output measure

t

right-of-use asset

has the same meaning as defined in the **Capex IM**;

has the meaning specified in clause 2.2.8(4);

has the same meaning as under **GAAP** except that it excludes any part of the cost of that asset that is a **pass-through cost** or **recoverable cost**;

5

services

has the same meaning as defined in s 2 of the **Act**;

standard depreciation method

means the method specified in clause 2.2.4(2)

for determining depreciation;

standard error

means estimated standard deviation;

standard physical asset life

means life for an asset as specified in

Schedule A;

supply

has the same meaning as defined in s 2 of the

Act, and supplied must be construed

accordingly;

system operator

has the same meaning as defined in s 5 of the

Electricity Industry Act 2010;

Т

tax rules means the rules applicable to Transpower for

determining income tax payable in the Income Tax Act 2007 (as amended from time to time, and any equivalent preceding legislation, or any subsequent legislation that supplements

or replaces that Act);

term credit spread difference means the amount determined in accordance

with clause 2.4.8(1);

term credit spread differential means the amount determined in accordance

with, for the purpose of-

(a) Part 2, clause 2.4.9(3); and

(b) Part 3, clause 3.5.8(3);

term credit spread differential

allowance

means the sum of term credit spread differentials;

thresholds notice means the Commerce Act (Transpower

Thresholds) Notice 2008;

**TPM** means the transmission pricing methodology

applicable to a **pricing year** in a **regulatory period**, as specified in the **code**, as amended

from time to time;

**Transpower** has the same meaning as defined in s 54B of

the Act;

U

**unallocated closing RAB value** means the value determined in accordance

with clause 2.2.3(2);

**unallocated depreciation** means an allowance to account for the

diminution in an asset's remaining service life potential in the **disclosure year** in question determined in accordance with clause

2.2.4(1);

unallocated initial RAB value means value of an asset in the initial RAB

determined in accordance with clause

2.2.2(1);

**unallocated opening RAB value** means the value determined in accordance

with clause 2.2.3(1);

<u>unallocated revaluation</u> <u>means the amount determined in accordance</u>

with clause 2.2.8(1);

unforeseeable E & D project has the meaning specified in clause 3.7.9(2);

Unforeseeable Enhancement and has the meaning specified in clause 3.7.3B(2);

Development Project

#### unregulated service

means any good or service supplied by Transpower other than electricity transmission services;

V

value of commissioned asset

means the value determined in accordance with clause  $2.2.\underline{107}(1)$ ;

value of found asset

means the value determined in accordance with clause 2.2.118(2);

valuer

means an individual who-

- (a) is registered as a valuer under the Valuers Act 1948;
- (b) holds a current practising certificate issued by-
  - (i) the Property Institute of New Zealand; or
  - (ii) the New Zealand Institute of Valuers;
- (c) has been engaged to act in his or her professional capacity as a valuer; and
- (d) is **independent**;

vanilla NZ\$ denominated bonds

means senior unsecured nominal debt obligations denominated in New Zealand dollars without callable, puttable, conversion, profit participation, credit enhancement or collateral features;

W

WACC

means weighted average cost of capital;

working day

has the same meaning as defined in s 2 of the **Act**; and

works under construction

means an asset, or a collection of assets that-

- (a) has been or is being constructed by, or on behalf of, Transpower;
- (b) has not been **commissioned**; and
- (c) Transpower intends to commission.

## PART 2 INPUT METHODOLOGIES FOR INFORMATION DISCLOSURE

#### SUBPART 1 Cost allocation

#### 2.1.1 Cost allocation process

- (1) For the purpose of any requirement in an **ID determination** to disclose-
  - (a) regulated service asset valuesasset values;
  - (b) capital expenditure; or
  - (c) operating costs,

amounts or values thereof allocated to activities undertaken by **Transpower** to **supply electricity transmission services** other than **system operator** services must be net of amounts implicitly or explicitly recoverable by **Transpower** in respect of its **supply** of **system operator** services under any agreement in respect of such services between **Transpower** and the **Electricity Authority**.

- (2) In this clause, 'asset value' means, in respect of an asset used by **Transpower** in the supply of electricity transmission services, in-
  - (a) the disclosure year 2011, its unallocated initial RAB value; and
  - (b) all other disclosure years, its unallocated closing RAB value.
- (2) Subclause (3) applies if, in a disclosure year,-
  - (a) the regulated service asset values that are not directly attributable exceed 2% of total regulated service asset values; or
  - (b) operating costs that are not directly attributable exceed 2% of total operating costs.
- (3) If this subclause applies, regulated service asset values and operating costs must be allocated in accordance with subclauses (4) and (5) for the purposes of-
  - (a) a requirement in an ID determination to disclose operating costs or regulated service asset values, from the beginning of the next disclosure vear; and
  - (b) an **IPP determination**, from the beginning of the next **regulatory period**.
- (4) Any operating costs and regulated service asset values that are directly attributable to-
  - (a) electricity transmission services supplied by Transpower must be allocated to electricity transmission services; and
  - (b) any unregulated services supplied by Transpower must be allocated to unregulated services.
- (5) Any **operating costs** and **regulated service asset values** that are not allocated in accordance with subclause (4) must be allocated to **electricity transmission services** or to **unregulated services** in accordance with clause 2.1.2.
- 2.1.2 Accounting-based allocation approach (ABAA)
- (1) Cost allocators must be used to proportionally allocate operating costs not directly attributable, less any arm's-length deduction, to-

- (a) **electricity transmission services**; and
- (b) unregulated services.
- (2) Asset allocators must be used to proportionally allocate regulated service asset values not directly attributable, less any arm's-length deduction, to-
  - (a) electricity transmission services; and
  - (b) unregulated services.
- (3) If **Transpower** uses a **proxy cost allocator** or a **proxy asset allocator** for the purposes of this clause, **Transpower** must, in accordance with the requirements in the relevant **ID determination**, explain-
  - (a) why a causal relationship cannot be established; and
  - (b) the rationale for using that **proxy cost allocator** or **proxy asset allocator**.

#### SUBPART 2 Asset valuation

#### 2.2.1 Composition of initial RAB

Initial RAB means assets included in the 2011 thresholds regulatory asset base, less-

- (a) excluded assets:
- (b) intangible assets, unless they are-
  - (i) **finance leases**; or
  - (ii) identifiable non-monetary assets; and
- (c) works under construction.

#### 2.2.2 Initial RAB values for assets

- (1) Subject to subclause (2), the unallocated initial RAB value of an asset is its value determined as of 30 June 2011 in accordance with the **thresholds notice**.
- (2) For the purpose of subclause (1), where an asset is used by **Transpower** in the **supply** of **system operator** services, the unallocated initial RAB value is the value of the asset had no allocation of asset value relevant to the **thresholds notice** been undertaken.
- (3) The initial RAB value of an asset is determined as the value allocated to **electricity transmission services** as a result of-
  - (a) adopting its unallocated initial RAB value; and
  - (b) applying clause 2.1.1(1) to it.

#### 2.2.3 RAB roll forward

- (1) Unallocated opening RAB value in respect of an asset in relation to-
  - (a) the disclosure year 2012, is its unallocated initial RAB value; and
  - (b) a **disclosure year** thereafter, is its **unallocated closing RAB value** in the preceding **disclosure year**.
- (2) Unallocated closing RAB value means, in the case of-
  - (a) a found asset, its value of found asset;
  - (b) a **disposed asset**, nil;
  - (c) a lost asset, nil;
  - (d) an anticipatory connection asset of which any anticipatory capacity has, during the disclosure year in question, become subject to a new

<u>investment contract</u>, is the value determined in accordance with subclause (2A);

(d)(e) any other asset with an unallocated opening RAB value, the value determined in accordance with the formula-

unallocated opening RAB value - unallocated depreciation <u>+</u> <u>unallocated revaluation</u>;

- (e)(f) an asset to which clause 2.2.10(4)(b)(i)7(4)(b)(i) applies, the result of the formula in paragraph (d), increased by the amount of expenditure described in clause 2.2.10(4)(b)(i)7(4)(b)(i) in the disclosure year in question; and
- (f)(g) any other asset having a **commissioning date** in the **disclosure year** in question, the value determined in accordance with the formula-value of **commissioned asset unallocated depreciation**.
- (2A) Unallocated closing RAB value means, in respect of an **anticipatory connection asset** described in subclause (2)(d),-
  - (a) if the asset has an unallocated opening RAB value, an amount determined in accordance with the following formula:

    (unallocated opening RAB value unallocated depreciation)
    - [(opening ACA capacity closing ACA capacity) ÷ opening ACA capacity
      ×

(unallocated opening RAB value – unallocated depreciation)]; or

- (b) if the asset has a commissioning date in the disclosure year in question, an amount determined in accordance with the formula:

  (value of commissioned asset unallocated depreciation)
  - [(opening ACA capacity closing ACA capacity) ÷ opening ACA capacity

    ×
- (3) Opening RAB value in respect of an asset, is, for-
  - (a) the disclosure year 2012, its initial RAB value; and
  - (b) a disclosure year thereafter, its closing RAB value in the preceding disclosure year.

(value of commissioned asset – unallocated depreciation)].

- (4) Closing RAB value, in respect of an asset, is determined as the value allocated to **electricity transmission services** by-
  - (a) adopting its unallocated closing RAB value; and
  - (b) applying 2.1.1(1) to it.
- (5) Subclause (6) applies to an **anticipatory connection asset** that was **commissioned**before the start of the next **disclosure year** that begins after this subclause comes into force (referred to in subclause (6) as the 'next **disclosure year**').
- (6) Despite subclause (1), the **unallocated opening RAB value** of the asset is the value that would apply if the asset had been given an unallocated opening RAB value-
  - (a) for the disclosure year in which it was commissioned; and
  - (b) for each disclosure year between that disclosure year and the next disclosure year,

in accordance with clause 2.2.10(1) and subclauses (2)(d) and (2A) as if those clauses were in force on the date on which the asset was **commissioned**, and had remained in force since that date.

#### 2.2.4 Depreciation

- (1) Unallocated depreciation is determined, subject to subclause (3) and clause <a href="2.2.5">2.2.5</a> and 2.2.65, in accordance with the formula, in the case of
  - (a) an asset with an unallocated opening RAB value -
    - [1 ÷ remaining asset life] × unallocated opening RAB value; and
  - (b) an asset having a commissioning date in the disclosure year in question

 $[1 \div remaining asset life] \times unallocated opening RAB value \times the fraction of the disclosure year from the commissioning date to the last day of the disclosure year.$ 

- (2) Depreciation is determined, subject to subclause (3)(a), in accordance with the formula, in the case of-
  - (a) an asset with an opening RAB value unallocated opening RAB value [1 ÷ remaining asset life] × opening RAB value; and
  - (b) an asset having a **commissioning date** in the **disclosure year** in question

[1 ÷ remaining asset life]

×

Value allocated to electricity transmission services by adopting the value of commissioned asset and applying clause 2.1.1 $\frac{(1)}{1}$  to it as if it were an asset value

×

the fraction of the disclosure year from the commissioning date to the last day of the disclosure year.

- (3) For the purposes of subclauses (1) and (2)-
  - (a) unallocated depreciation and depreciation are nil in the case of-
    - (i) land;
    - (ii) an easement other than a fixed life easement; and
    - (iii) a **network spare** in respect of the period before which depreciation for the **network spare** in question commences under **GAAP**; and
  - (b) in all other cases, where an asset's **physical asset life** at the end of the **disclosure year** is nil-
    - (i) unallocated depreciation is the asset's unallocated opening RAB value; and
    - (ii) depreciation is the asset's **opening RAB value**.

#### 2.2.5 Depreciation – alternative depreciation method

Where, under an IPP, an alternative depreciation method is applied to an asset, unallocated depreciation and depreciation for that asset, for each disclosure year of the regulatory period, are determined in accordance with that alternative depreciation method, subject to clause 2.2.6 in the case of unallocated depreciation.

#### 2.2.52.2.6 Unallocated depreciation constraint

- (1) For the purpose of clause 2.2.4 and 2.2.5, and subject to subclause (2), the sum of unallocated depreciation of an asset calculated over its physical asset life may not exceed the sum of, in the case of an asset-
  - (a) all unallocated revaluations applying to that asset in all disclosure years; and
  - (b) in the case of an asset-
    - (i) in the initial RAB, its unallocated initial RAB value; or
    - (ii) not in the initial RAB, its value of commissioned asset or value of found asset.
  - (a) in the initial RAB, its unallocated initial RAB value; or
  - (b) not in the initial RAB, its value of commissioned asset or value of found asset.
- (2) For the purpose of subclause (1), the sum of increases to which clause 2.2.3(2)(fe) refers for all **disclosure years** is treated as an increase in the **value of commissioned asset** of the asset in question.

#### 2.2.62.2.7 Physical asset life

- (1) Physical asset life means a finite period relating to an asset, being, in the case of-
  - (a) a **fixed life easement**, the fixed duration or fixed period (as the case may be) referred to in the definition of **fixed life easement**;
  - (b) a dedicated asset which is not expected to be used by Transpower to provide electricity transmission services beyond the term of the fixed term agreement relating to the asset between Transpower and the customer, at Transpower's election, the term of that agreement;
  - (c) an extended life asset or a refurbished asset, its physical service life potential as determined by **Transpower**;
  - (d) a stranded asset, the service life potential specified by the **Commission**;
  - (e) a reduced life asset, its physical service life potential determined by an **engineer**, subject to subclause (2);
  - (f) a **found asset** for which a similar asset exists as described in subclause 2.2.11(2)(b)(i)8(2)(b)(i), the asset life applying to the similar asset;
  - (g) the HVAC lines pseudo asset described in Schedule 1, clause 3(4)(d) of the **thresholds notice**, five years from 1 July 2011;
  - (h) a non-network asset or **right-of-use asset**, its asset life determined under **GAAP**;
  - (i) an asset acquired or transferred from a regulated supplier, the asset life that the vendor would have assigned to the asset at the end of its disclosure year had the asset not been transferred;

- (j) an asset acquired or transferred from an entity other than a **regulated** supplier:
  - (i) where a similar asset exists, the asset life assigned to the similar asset; or
  - (ii) where a similar asset does not exist, the physical service life potential determined by an **engineer**, subject to subclause (2);
- (k) an asset not referred to in paragraphs (a) to (h)-
  - (i) having a standard physical asset life, its standard physical asset life;
  - (ii) not having a **standard physical asset life**, if there is a similar physical asset in terms of asset type with an **unallocated opening RAB value**, the physical asset life of that similar physical asset; and
  - (iii) in all other cases, its physical service life potential determined by an **engineer**, subject to subclause (2);
- (I) a composite asset, the average asset life of the assets comprising it determined in accordance with paragraphs (a) to (i), with the modification that each such asset life must be weighted with respect to the proportion of its respective **opening RAB value** to the sum of the **opening RAB values** of the components in the earliest **disclosure year** in which all component assets were held by **Transpower**; and
- (m) the **RCP1 psuedo asset**, 31 years.
- (2) For the purpose of subclauses (1)(e) and (1)(k)(iii), a determination of physical service life potential made by an **engineer**-
  - (a) in relation to an asset with an **unallocated opening RAB value** is deemed applicable to all assets of similar asset type for which there is a requirement in this clause for an **engineer's** determination of physical service life potential; and
  - (b) must be evidenced by a report written by that engineer that includes an acknowledgement that the report may be publicly disclosed by Transpower pursuant to an ID determination.
- (3) In this clause-
  - 'dedicated asset' means an asset operated for the benefit of a particular customer pursuant to a fixed term agreement for the supply of electricity transmission services between Transpower and that customer;
  - (b) 'extended life asset' means an asset whose physical service life potential is greater than its **standard physical asset life**;
  - (c) 'refurbished asset' means an asset on which work (other than maintenance) has been carried out resulting in an extension to its physical service life potential;
  - (d) 'reduced life asset' means an asset determined by **Transpower** to have a physical service life potential shorter than its **standard physical asset life**;
  - (e) 'stranded asset' means an asset-
    - (i) that has an opening RAB value; and
    - (ii) in respect of which, on application by **Transpower** and in accordance with any process for the purpose specified in an **IPP determination**,

the **Commission** has determined a service life potential shorter than its **standard physical asset life**; and

(f) 'composite asset' means a configuration of two or more assets that is not capable of operation in the absence of any of those assets.

#### 2.2.8 Revaluation

(1) Unallocated revaluation is the amount determined, subject to subclause (3), in accordance with the formula-

#### unallocated opening RAB value × revaluation rate.

(2) Revaluation is the amount determined, subject to subclause (3), in accordance with the formula-

#### opening RAB value × revaluation rate.

- (3) For the purposes of subclauses (1) and (2), where-
  - (a) the asset's physical asset life at the end of the disclosure year is nil; or
  - (b) the asset is a-
    - (i) **disposed asset**; or
    - (ii) lost asset,

unallocated revaluation and revaluation are nil.

(4) Revaluation rate means, in respect of a **disclosure year**, the rate determined in accordance with the formula-

 $(CPI_4 \div CPI_4^{-4}) -1,$ 

where-

<u>CPI<sub>4</sub></u> means <u>CPI</u> for the quarter that coincides with the end of the <u>disclosure</u> year; and

<u>CPI<sub>4</sub>-4</u> means **CPI** for the quarter that coincides with the end of the preceding <u>disclosure year.</u>

#### 2.2.9 Revaluation treated as income

Revaluation, for the purpose of determining profitability, must be treated as income.

#### 2.2.72.2.10 Value of commissioned assets

- (1) Value of commissioned asset, in relation to an asset, is the cost of the asset to **Transpower** determined by applying **GAAP** to the asset as on its **commissioning date**, except that the cost of-
  - (a) an intangible asset, unless it is-
    - (i) a **finance lease**; or
    - (ii) an identifiable non-monetary asset,

is nil

- (b) an **easement** created by **Transpower** in respect of **easement land**, is limited to the sum of-
  - (i) legal and administrative costs incurred by **Transpower** in relation to the **easement's** creation;
  - (ii) compensation, determined by a **valuer**, for any amount that would otherwise have been paid by **Transpower** on arm's-length terms to a third party owner of **easement land** as compensation for the

- permanent and material reduction in the value of the **land** or disruption, on account of the **easement's** creation; and
- (iii) the cost of financing the purchase of the **easement land**, determined in respect of the period on and from the date of acquisition until the **easement's** creation,

where any gain or loss made by **Transpower** on the sale or disposal of the **easement land** is ignored;

- (c) easement land, is nil;
- (d) an asset used in providing electricity transmission services pursuant to a new investment contract, is nil;
- (e) a **network spare** whose cost is not treated wholly as or part of the cost of an asset under **GAAP**, is nil;
- (f) an asset-
  - (i) acquired from another regulated supplier; and
  - (ii) used by that regulated supplier in the supply of regulated goods or services,

is limited to the unallocated closing RAB value of the asset that would have applied for the other regulated supplier, had the asset not been acquired by Transpower in the disclosure year of the regulated supplier when the asset was transferred (as 'unallocated closing RAB value' is defined in the input methodologies applying to the supply of regulated goods or services by the other regulated supplier);

- (g) an asset that was previously used by Transpower in its supply of other regulated goods or services is limited to the unallocated opening RAB value of the asset in relation to those other regulated goods or services as on the day before the commissioning date (as 'unallocated opening RAB value' is defined in the input methodologies applying to the regulated goods or services supplied by Transpower); and
- (h) an asset or a component of a commissioned asset acquired infrom a related party transaction, other than an asset to which paragraphs (f) or
   (g) applies, is the cost specified in subclause (5); and y is-
  - (i) its depreciated historic cost in respect of the related party determined by applying GAAP as on the day before the acquisition by the Transpower; or
  - (ii) where sufficient records do not exist to establish this cost, its market value as at its commissioning date as determined by a valuer.
- (i) an anticipatory connection asset is its value as determined under any other relevant provision of this clause, multiplied by the anticipatory capacity of the asset on its commissioning date, divided by the asset's total capacity.
- (2) When applying **GAAP** under subclause (1), the cost of financing-
  - (a) the cost of financing is-

- (i) is applicable only in respect of the period commencing on the date the asset becomes a works under construction and terminating on its commissioning date; and
- (ii) calculated using a rate not greater than **Transpower's** weighted average of borrowing costs for each applicable **disclosure year**-; and
- (b) the value of a commissioned asset that, before its commissioning date, Transpower acquired from another regulated supplier as works under construction, is limited to the sum of:
  - (i) the cost incurred by the other **regulated supplier** in constructing those works; and
  - (ii) any additional costs of **Transpower** in completing the construction of those works (excluding any amount paid to the other **regulated** supplier).
- (3) For the purposes of subclause (2)(a)(ii)(b), the 'weighted average of borrowing costs' is calculated for a **disclosure year** using principles set out in **GAAP**, where:
  - (a) the cost of financing rate is the weighted average of the costs applicable to borrowings in respect of **capital expenditure** that are outstanding during the **disclosure year**;
  - (b) the total costs applicable to borrowings outstanding, as used in calculating the weighted average, must include costs of borrowings made specifically for the purpose of any particular –
    - (i) capital expenditure projects; or
    - (ii) capital expenditure programmes; and
  - (c) the amount of borrowing costs capitalised during the disclosure year must not exceed the amount of borrowing costs incurred during the disclosure year.
- (4) For the avoidance of doubt-
  - (a) revenue derived in relation to works under construction that is not included in regulatory income under an ID determination or preceding regulatory information disclosure requirements reduces the cost of an asset by the amount of the revenue where such reduction is not otherwise made under GAAP;
  - (b) where expenditure on an asset which forms part of the cost of that asset under GAAP is incurred by Transpower after the asset was first commissioned, such expenditure may be treated, at Transpower's election, as relating to-
    - (i) that asset; or
    - (ii) a separate asset.
- (5) For the purpose of subclause (1)(h), the cost of a **commissioned** asset, or a component of a **commissioned** asset, acquired in a **related party transaction**, must be set on the basis that:

- (a) the cost is not greater than either of the following amounts determined under GAAP:
  - (i) the value that would have applied if that transaction had been an arm's-length transaction; or
  - (ii) the actual amount charged to **Transpower** by the **related party**; and
- (b) for the purpose of paragraph (a)(i), an objective and independent measure must be used in determining the terms of an arm's-length transaction.
- (6) For the purpose of subclause (5)(a), a related party transaction will be treated as if it had the terms of an arm's-length transaction if the commissioned asset, or the component of the commissioned asset, acquired from a related party is valued at the cost incurred by the related party, provided that this is:
  - (a) fair and reasonable to **Transpower**; and
    (c)(b) substantially the same as the cost that has been incurred or would be incurred by the **related party** in providing the same type of asset to third parties.

#### 2.2.82.2.11 Value of found assets

- (1) Found asset means, in relation to a disclosure year, an asset-
  - (a) other than **easement land**;
  - (b) other than an intangible asset, unless it is-
    - (i) a **finance lease**; or
    - (ii) an identifiable non-monetary asset; and
  - (c) not having a **commissioning date** in the **disclosure year** in question;
  - (d) the value of which-
    - (i) is not included as an **unallocated opening RAB value** in the **disclosure year** in question nor was so included in any prior disclosure year in accordance with clause 2.2.3(1); and
    - (ii) was not included in an **unallocated closing RAB value** in any prior **disclosure year** in accordance with clause 2.2.3(2); and
  - (e) first determined by **Transpower** in the **disclosure year** in question to have a **commissioning date** after the **disclosure year** 2011.
- (2) The value of found asset for a found asset is-
  - (a) its cost calculated consistently with GAAP; or
  - (b) where sufficient records do not exist to establish its cost for the purposes of **GAAP**,
    - (i) where an asset with an unallocated opening RAB value for that disclosure year is similar (in terms of asset type and age) to the found asset, the unallocated opening RAB value of the similar asset; and
    - (ii) in all other cases, its market value as determined by a **valuer** as at the date that the asset was first determined by **Transpower** to have been **commissioned** in a prior **disclosure year** after the **disclosure year** 2011.

#### 2.2.92.2.12 Adjustment to asset values and establishment of RCP1 pseudo asset

- (1) Each asset with a **commissioning date** in the period commencing
  - (a) on the first day of disclosure year 2012; and
  - (b) ending on the last day of the **disclosure year** 2015 shall have its values calculated under-
  - (c) clause 2.2.3(1); and
  - (d) clause 2.2.3(3),

for the **disclosure year** 2016 adjusted by the amounts necessary to produce the value for each asset as if **depreciation** had applied for the **disclosure year** in which the asset's **commissioning date** occurred.

- (2) The 'RCP1 psuedo asset' is an asset established as of the first day of the **disclosure** year 2016 with-
  - (a) an **unallocated opening RAB value** equal to the sum of adjustments for all assets made under subclause (1) in respect of clause 2.2.3(1); and
  - (b) an **opening RAB value** equal to the sum of all adjustments for all assets made under subclause (1) in respect of clause 2.2.3(3).

#### SUBPART 3 Treatment of taxation

#### 2.3.1 Regulatory tax allowance

- (1) Regulatory tax allowance is determined by applying the **tax rules** and the **corporate tax rate** to the regulatory profit / (loss) before tax.
- (2) For the purpose of subclause (1), 'regulatory profit / (loss) before tax' means the amount of 'regulatory profit / (loss) before tax', as determined in accordance with an **ID determination**.
- (3) For the purpose of subclause (1), in applying the **tax rules** in respect of particular items of income and expenses included in 'regulatory profit / (loss) before tax'-
  - (a) a tax deduction for interest incurred in relation to debt must be substituted with a tax deduction for notional deductible interest;
  - (b) any tax deduction for depreciation in respect of an asset must be calculated by applying the tax rules to the regulatory tax asset value; and
  - (c) the effect of any-
    - (i) tax losses (other than those produced from the **supply** of **electricity transmission services**); and
    - (ii) subvention payment,

made by **Transpower** must be ignored.

(4) For the purpose of subclause (3)(a), 'notional deductible interest' means the amount determined in accordance with the formula-

( $sum\ of\ opening\ RAB\ values \times leverage \times cost\ of\ debt) + term\ credit\ spread\ differential\ allowance.$ 

#### 2.3.2 Regulatory tax asset value

(1) Regulatory tax asset value, in relation to an asset, means the value determined in accordance with the formula-

tax asset value  $\times$  result of asset allocation ratio.

- (2) For the purpose of subclause (1), 'tax asset value' means, in respect of-
  - (a) an asset-
    - (i) acquired from a **regulated supplier** who used it to **supply regulated goods or services**; or
    - (ii) acquired or transferred from a related party,

the value of the asset determined by applying the tax depreciation rules to its notional tax asset value; and

- (b) any other asset, its adjusted tax value.
- (3) In this clause-
  - (a) 'tax depreciation rules' means the **tax rules** that relate to the determination of depreciation allowances for tax purposes;
  - (b) 'adjusted tax value' has the same meaning as in the tax depreciation rules.
- (4) 'Notional tax asset value' means, for the purpose of-
  - (a) subclause (2)(a)(i), the value after applying the tax depreciation rules to the tax asset value (as 'tax asset value' is defined in the input methodologies applying to the regulated goods or services in question) in respect of the disclosure year in which the asset was acquired; and
  - (b) subclause (2)(a)(ii), the value in respect of the **disclosure year** in which the asset was acquired or transferred that is-
    - (i) consistent with the tax rules; and
    - (ii) limited to its value of commissioned asset.
- (5) For the purpose of subclause (1), 'result of asset allocation ratio' means, where an asset or group of assets maintained under the **tax rules**-
  - (a) has a matching asset or group of assets maintained for the purpose of Subpart 2, the value obtained in accordance with the formula-

**opening RAB value** or sum of **opening RAB values**, as the case may be

÷

unallocated opening RAB value or sum of unallocated opening RAB values, as the case may be,

applying the formula in respect of the asset or smallest group of assets maintained for the purpose of Subpart 2 that has a matching asset or group of assets maintained under the **tax rules**; and

(b) does not have a matching asset or group of assets maintained for the purpose of Subpart 2, the value of the asset allocated to the **supply** of **electricity transmission services** were clause 2.1.1(1) to apply to the asset or group of assets.

# SUBPART 4 Cost of capital

- 2.4.1 Methodology for estimating weighted average cost of capital
- (1) The **Commission** will determine a mid-point estimate of vanilla **WACC** for each **disclosure year**-
  - (a) in respect of the <u>regulatory period term5 years</u> commencing on the first day of the **disclosure year** in question;
  - (b) within 1 month of the start of the disclosure year in question; and
  - (c) in accordance with the formula-

$$r_d L + r_e (1 - L)$$
.

- (2) The **Commission** will determine a mid-point estimate of post-tax **WACC** for each **disclosure year** -
  - in respect of the <u>regulatory period term</u>5 years commencing on the first day of the <u>disclosure year</u> in question;
  - (b) within 1 month of the start of the disclosure year in question; and
  - (c) in accordance with the formula-

$$r_d (1 - T_c)L + r_e (1 - L).$$

- (3) In this clause-
  - L is **leverage**;

 $r_d$  is the cost of debt and is estimated in accordance with the formula:

$$r_f + p + d$$
;

 $r_e$  is the cost of equity and is estimated in accordance with the formula:

$$r_f(1 - T_i) + \theta_e TAMRP;$$

 $T_c$  is the average corporate tax rate;

 $r_f$  is the risk-free rate;

p is the average debt premium;

d is the debt issuance costs;  $T_i$  is the average investor tax rate;

 $\theta_e$  is the equity beta; and

TAMRP is the tax-adjusted market risk premium.

- (4) For the purpose of this clause-
  - (a) the <u>leverage</u>, average investor tax rate, the equity beta, the debt issuance costs, the average corporate tax rate and the tax-adjusted market risk premium are the values specified in or determined in accordance with clause 2.4.2; and
  - (b) the risk-free rate must be estimated in accordance with clause 2.4.3.
- 2.4.2 Fixed WACC parameters
- (1) Leverage is 412%.
- (2) 'Average investor tax rate' is the average of the investor tax rates that, as at the date that the estimation is made, will apply to each of the **disclosure years** in the

- <u>regulatory period term</u>5 <u>year period</u> commencing on the first day of the **disclosure year** in question.
- (3) For the purpose of subclause (2), 'investor tax rate' is, for each **disclosure year**, the maximum **prescribed investor rate** applicable at the start of that **disclosure year** to an individual who is-
  - (a) resident in New Zealand; and
  - (b) an investor in a multi-rate PIE.
- (4) The 'average corporate tax rate' is the average of the **corporate tax rates** that, as at the date that the estimation is made, will apply during the <u>regulatory period term5</u> <u>year period</u> commencing on the first day of the **disclosure year** in question.
- (5) 'Equity beta' is 0.<u>5960</u>.
- (6) 'Debt issuance costs' are 0.2% where the regulatory period term is five years and 0.25% where the regulatory period term is four years.
- (7) 'Tax-adjusted market risk premium' is, for a 5 year period commencing on the first day of a disclosure year, 7.0%.

#### 2.4.3 Methodology for estimating risk-free rate

The Commission will estimate a risk-free rate-

- (a) for each disclosure year; and
- (b) within 1 month of the start of the disclosure year in question,

by-

- (c) obtaining, for notional benchmark New Zealand government New Zealand dollar denominated nominal bonds the wholesale market linearly-interpolated bid yield to maturity, for a residual period to maturity equal to <a href="mailto:the regulatory period term5">the regulatory period term5</a> years on each business day in the 3 months preceding the start of the disclosure year;
- (d) calculating the annualised interpolated bid yield to maturity for each **business day**; and
- (e) calculating the unweighted arithmetic average of the daily annualised interpolated bid yields to maturity.

#### 2.4.4 Methodology for estimating average debt premium

- (1) The **Commission** will determine an estimate of an amount for the **average debt premium**-
  - (a) for each disclosure year; and
  - (b) within 1 month of each disclosure year.
- (2) For the purpose of subclause (1), 'average debt premium' means the <a href="mailto:simple\_unweighted">simple\_unweighted</a> arithmetic average of the five **debt premium** values estimated in accordance with subclauses (4), and (5) and (6) for:
  - (a) the current debt premium reference year; and
  - (b) the four previous **debt premium reference years**.
- (3) For the purpose of subclause (2)(a), 'current debt premium reference year' refers to the **debt premium reference year** that contains the start of the **disclosure year**.

- (4) For the **debt premium reference year** 2017 or earlier, the following **debt premium** values apply
  - (a) 2013 = 2.24%;
  - (b) 2014 = 2.04%;
  - (c) 2015 = 1.76%;
  - (d) 2016 = 1.59%; and
  - (e) 2017 = 1.59%
- (5)(4) Debt premium means the spread between-
  - (a) the bid yield to maturity on vanilla NZ\$ denominated bonds that-
    - (i) are issued by an **EDB** or a **GPB**;
    - (ii) are publicly traded;
    - (iii) have a qualifying rating of grade BBB+; and
    - (iv) have a remaining term to maturity of 5 years; and
  - (b) the contemporaneous interpolated bid yield to maturity of benchmark New Zealand government New Zealand dollar denominated nominal bonds having a remaining term to maturity of 5 years.
- (6)(5) For the purpose of subclause (2), the amount of the debt premium will be estimated by-
  - (a) identifying publicly traded vanilla NZ\$ denominated bonds issued by a qualifying issuer that are-
    - (i) investment grade credit rated; and
    - (ii) of a type described in the paragraphs of subclause (67);
  - (b) in respect of each bond identified in accordance with paragraph (a)-
    - (i) obtaining its wholesale market annualised bid yield to maturity;
    - (ii) calculating by linear interpolation with respect to maturity, the contemporaneous wholesale market annualised bid yield to maturity for a notional benchmark New Zealand government New Zealand dollar denominated nominal bond with the same remaining term to maturity; and
    - (iii) calculating its contemporaneous interpolated bid to bid spread over notional benchmark New Zealand government New Zealand dollar denominated nominal bonds with the same remaining term to maturity, by deducting the yield calculated in accordance with subparagraph (ii) from the yield obtained in accordance with subparagraph (i),

for each **business day** in the 12 months immediately preceding the start of the **debt premium reference year**;

- (c) calculating, for each bond identified in accordance with paragraph (a), the unweighted arithmetic average of the daily spreads identified in accordance with paragraph (b)(iii); and
- (d) subject to subclause (67), estimating, by taking account of the average spreads identified in accordance with paragraph (c), and having regard to

the debt premium estimated from applying the **Nelson-Siegel-Svensson approach**, the average spread that would reasonably be expected to apply to a **vanilla NZ\$ denominated bond** that-

- (i) is issued by an **EDB** or a **GPB** that is neither 100% owned by the Crown nor a **local authority**;
- (ii) is publicly traded;
- (iii) has a qualifying rating of grade BBB+; and
- (iv) has a remaining term to maturity of 5 years.
- (7)(6) For the purpose of subclauses (56)(a) and (56)(d), the **Commission** will have regard, subject to subclause (78), to the spreads observed on the following types of **vanilla NZ\$ denominated bonds** issued by a **qualifying issuer**:
  - (a) those that-
    - (i) have a qualifying rating of grade BBB+; and
    - (ii) are issued by an **EDB** or a **GPB** that is neither 100% owned by the Crown nor a **local authority**;
  - (b) those that-
    - (i) have a qualifying rating of grade BBB+; and
    - (ii) are issued by an entity other than an **EDB** or a **GPB** that is neither 100% owned by the Crown nor a **local authority**;
  - (c) those that-
    - (i) have a qualifying rating of a grade different to BBB+; and
    - (ii) are issued by an **EDB** or a **GPB** that is neither 100% owned by the Crown nor a **local authority**;
  - (d) those that-
    - (i) have a qualifying rating of a grade different to BBB+; and
    - (ii) are issued by an entity other than an **EDB** or a **GPB** that is neither 100% owned by the Crown nor a **local authority**; and
  - (e) those that are-
    - (i) investment grade credit rated; and
    - (ii) issued by an entity that is 100% owned by the Crown or a **local** authority.
- (8)(7) For the purpose of subclause (67) -
  - (a) progressively lesser regard will ordinarily be given to the spreads observed on the bond types in accordance with the order in which the bond types are described in subclause (67);
  - (b) the spread on any bond of the type described in subclause (67) that has a remaining term to maturity of less than 5 years will ordinarily be considered to be the minimum spread that would reasonably be expected to apply on an equivalently credit-rated bond issued by the same entity with a remaining term to maturity of 5 years; and
  - (c) the **Commission** will adjust spreads observed on bonds described under subclauses (67)(b) to (67)(e) to approximate the spread that is likely to

have been observed had the bonds in question been of the type described in subclause (67)(a).

- (9)(8) For the purposes of subclause (56)(d), the 'Nelson-Siegel-Svensson approach' means a method for modelling yield curves and term structures of interest rates which establishes a relationship between term to maturity and the **debt premium**, and where a curve is generated by changing the parameters of a yield curve functional form to minimise the squared deviation between estimated and observed values.
- 2.4.5 Methodology for estimating the WACC range and the 657th percentile of WACC
- (1) The Commission will determine a WACC range for each mid-point estimate of WACC-
  - (a) for each disclosure year; and
  - (b) within 1 month of the start of the disclosure year in question.
- (2) For the purpose of subclause (1), 'WACC range' means the values falling between the 25th percentile and 75th percentile, inclusive, of the **mid-point estimate of WACC**.
- (3) For the purpose of subclause (2)-
  - the mid-point estimate of WACC must be treated as the 50th percentile;
     and
  - (b) the
    - 75th percentile must be determined in accordance with the formulamid-point estimate of WACC + 0.674 x standard error; and
    - (ii) 25th percentile must be determined in accordance with the formulamid-point estimate of WACC - 0.674 x standard error,

where the **standard error** of the relevant **mid-point estimate of WACC** is 0.0101.

- (4) The **Commission** will determine a 6<u>5</u>7th percentile estimate of vanilla **WACC** and post-tax **WACC**
  - (a) for each disclosure year; and
  - (b) within 1 month of the start of the **disclosure year** in question.
- (5) For the purpose of subclause (4)-
  - (a) the mid-point estimate of WACC must be treated as the 50th percentile;and
  - (b) the 657th percentile must be determined in accordance with the formula-

mid-point estimate of WACC +  $0.\underline{385}440$  x standard error, where the standard error of the relevant mid-point estimate of WACC is 0.0101.

2.4.6 Publication of estimates relating to cost of capital

The **Commission** will publish all determinations and estimates that it is required to make under this Subpart-

- (a) on the **Commission's** website; and
- (b) no later than 1 month after having made them.

#### 2.4.7 Qualifying debt

- (1) Qualifying debt means a line of debt-
  - (a) with an original tenor greater than 5 years; and
  - (b) issued by Transpower.

#### 2.4.8 Term credit spread difference

(1) Term credit spread difference is determined in accordance with the formula-

T × U,

where-

(a) 'T' is the amount determined in accordance with the formula-

 $0.00075 \times (original tenor of the qualifying debt - 5)$ 

- (b) 'U' is the book value in New Zealand dollars of the **qualifying debt** at its date of issue.
- (2) For the purpose of this clause, where the **qualifying debt** is issued to a **related party**, 'original tenor of the **qualifying debt**' means the-
  - (a) tenor of the qualifying debt; or
  - (b) period from the **qualifying debt's** date of issue to the earliest date on which its repayment is or may be required,

whichever is the shorter.

#### 2.4.9 Methodology for estimating term credit spread differential

- (1) This clause applies to the determination of the amount of any **term credit spread differential** in respect of a **qualifying debt** for the purpose of disclosure under an **ID determination** of a-
  - (a) term credit spread differential allowance; or
  - (b) term credit spread differential.
- (2) Disclosure to which this clause applies may only be made by **Transpower** if its debt portfolio, as at the date of its most recently published audited financial statements, has a weighted average original tenor greater than 5 years.
- (3) Term credit spread differential is the amount determined in accordance with the formula-

$$(A \div B) \times C \times D$$
,

where-

- (a) 'A' is the sum of the **term credit spread difference** and debt issuance cost re-adjustment;
- (b) 'B' is the book value of **Transpower's** total interest-bearing debt as at **Transpower's** balance date in its audited financial statements published in the **disclosure year**;
- (c) 'C' is **leverage**; and
- (d) 'D' is the average of-
  - (i) the sum of **opening RAB values**; and
  - (ii) the sum of closing RAB values.

(4) For the purpose of subclause (3)(a), the 'debt issuance cost re-adjustment' is the amount determined in accordance with the formula-

 $(0.01 \div original\ tenor\ of\ the\ qualifying\ debt$  - 0.002) × book value in New Zealand dollars of the qualifying debt at its date of issue,

which amount, for the avoidance of doubt, will be a negative number.

# PART 3 INPUT METHODOLOGIES APPLYING TO INDIVIDUAL PRICE-QUALITY PATH

# SUBPART 1 Specification of price

#### 3.1.1 Price

- (1) For the purpose of s 53M(1)(a) of the **Act**, the maximum revenues that may be recovered by **Transpower** for **electricity transmission services** will be specified in an **IPP determination** as a revenue cap.
- (2) To comply with the revenue cap, the forecast revenue that **Transpower** uses for setting transmission charges under the **TPM** for each **pricing year** must not exceed the **forecast SMAR** for that **pricing year** of the **regulatory period**.
- (3) For the purpose of setting the 'forecast SMAR':
  - (a) the **Commission** must determine in an **IPP determination** for each **pricing year** of the **regulatory period**:
    - (i) the forecast MAR; and
    - (ii) the IPP revenue growth rate;
  - the present value of the aggregated forecast SMAR values for the regulatory period must equal the present value of the aggregated forecast MAR values for the regulatory period;
  - (c) the IPP revenue growth rate must be applied when calculating the forecast SMAR for each pricing year of the regulatory period after the first pricing year; and
  - (d) the respective present values in (b) must be calculated using the WACC.
- (4) For the purpose of subclause (3)(a), inputs to the calculation of the **forecast MAR** for each **pricing year** in a **regulatory period** must include, but are not limited to:
  - (a) the WACC;
  - (b) forecast EV adjustments;
  - (c) forecast pass-through costs; and
  - (d) forecast recoverable costs.
- (5) For the purposes of subclause (4)(b), the **forecast EV adjustment** is calculated in accordance with the formula-

$$= -x \frac{WACC}{\left(1 - \frac{1}{(1 + WACC)^y}\right)}$$

where-

x is the forecast closing post-tax **EV account** balance for the final **disclosure year** of  $RCP_{t-1}$  converted to a pre-tax revenue value by the addition of a tax gross-up amount, as specified in an **IPP determination**;

y is the number of years in  $RCP_t$ ;

*RCP*<sub>t-1</sub> is the **regulatory period** immediately before the **regulatory period** for which the **forecast MAR** is being calculated; and

 $RCP_t$  is the **regulatory period** to which the **forecast MAR** relates.

#### 3.1.2 Pass-through cost requirements

- (1) Subject to subclause (4), aA pass-through cost is a cost that-
  - (a) is listed in subclause (2); or
  - (b) is a <u>levylevy</u>, other than one listed in subclause (2), that meets the criteria specified in subclause (3).
- (2) For the purpose of subclause (1)(a), the costs are-
  - (a) rates on system fixed assets paid or payable by **Transpower** to a **local** authority under the Local Government (Rating) Act 2002; and
  - (b) levies levies payable -
    - (i) under regulations made under s 53ZE of the Act;
    - (ii) under regulations made under the Electricity Industry Act 2010; or
    - (iii) by all members of the approved scheme under Schedule 4 of the Electricity Industry Act 2010.
- (3) For the purpose of subclause (1)(b), the criteria are that the <u>levylevy-</u>
  - (a) is-
    - (i) associated with the provision of **electricity transmission services**;
    - (ii) outside the control of **Transpower**;
    - (iii) not a recoverable cost;
    - (iv) appropriate to be passed through to Transpower's customers; and
    - (v) one in respect of which provision for its partial or full recovery is not made explicitly or implicitly in the IPP;
  - (b) was reasonably unforeseen at the time the **IPP determination** was made;
  - (c) comes into effect during any **disclosure year** commencing in a **regulatory period**.
- (4) If clause 2.1.1(3) applies, where a cost relates to both electricity transmission services and other services supplied by Transpower, only the proportion of the cost attributable to the supply of electricity transmission services (as determined in accordance with clause 2.1.1), may be a pass-through cost.

# 3.1.3 Recoverable costs

- (1) Subject to subclause (4), aA recoverable cost is a cost that is-
  - (a) any amount that is-
    - (i) an **opex incentive amount**; or
    - (ii) a positive net balance determined in accordance with clause 3.6.6(2), provided that any requirements under an ID determination regarding auditor certification of any value determined in accordance with that clause have been met;
  - (b) subject to subclause (2), an instantaneous reserves availability charge, being a charge allocated to **Transpower** under-
    - (i) clause 8.59 of the **code**; or
    - (ii) any legislation Act or regulations that replaces that clause,

- net of any rebate received by **Transpower** in accordance with clause 8.65 of the **code**;
- (c) a transmission alternative operating cost, subject to the requirements in subclause (3), not to exceed the-
  - (i) actual transmission alternative operating cost incurred by **Transpower**; or
  - (ii) upper limit of transmission alternative operating costs approved in accordance with subclause (3),

whichever is lower;

- (d) in relation to a major capex project that has been approved by the Commission under the Capex IM, and subject to the requirements in subclause (3), any operating costs –
  - (i) incurred after the date of approval of the **major capex project** and in relation to the **major capex project**;
  - (ii) are not otherwise able to be recovered as part of the **major capex** allowance on the basis that the costs are not **capital expenditure**; and
  - (iii) where the sum of the operating costs and the **major capex** approved by the **Commission** in relation to the **major capex project** does not exceed the **major capex allowance**;
- (e) an amount determined by the **Commission** and specified in the **IPP**determination following an reconsideration and amendment of the **IPP**under clauses 3.7.113.7.4(1)(a)(i) and 3.7.5(1) for the prudent net additional operating costs, in excess of those provided in the **IPP**determination, incurred in responding to a catastrophic event;
- (f) in relation to an **E & D non-transmission solution**, following amendment of the **IPP** under clause 3.7.11, any operating costs:
  - (i) incurred after the date of approval of the **E & D non-transmission** solution and in relation to the solution;
  - (ii) that are not otherwise able to be recovered as part of the base capex allowances on the basis that the costs are not capital expenditure; and
  - (iv)(iii) where the sum of the operating costs and the additional base capex allowances approved by the Commission in relation to the E & D non-transmission solution does not exceed the total amount approved for that solution; and
- (e)(g) any levy-levy payable to Fire and Emergency New Zealand under the Fire and Emergency New Zealand Act 2017.
- (2) For the purpose of subclause (1)(b), an instantaneous reserves availability charge excludes-
  - (a) any 'event charges' payable by **Transpower**, as defined under-
    - (i) clause 8.64 of the code, or
    - (ii) any <u>legislationAct or regulations</u> that replaces that clause;

- (b) 50% of any such charge incurred by Transpower, except one incurred as a direct result of decommissioning of Pole 1 of the HVDC link, in relation to an asset remaining out of service after an initial period of 14 consecutive days out of service, insofar as the cumulative amount so incurred is less than or equal to 1% of Transpower's forecast MAR for the disclosure year in which the event causing the asset to be out of service commences, as specified in the IPP determination;
- (c) any such charge treated as **capital expenditure** (in accordance with **GAAP**) by **Transpower** in relation to the control systems integration of Pole 2 and the commissioning of Pole 3 of the HVDC link; and
- (d) any such charge that is treated as having been inefficiently incurred under **GAAP**.
- (3) For the purpose of subclause (1)(c) and subclause (1)(d), the requirements are that the cost must-
  - (a) be **operating expenditure**;
  - (b) be incremental to the **operating expenditure** allowance specified by the **Commission** in the **IPP determination**; and
  - (c) have been approved by the-
    - (i) **Electricity Commission** under Part F of the Electricity Governance Rules 2003;
    - (ii) **Commission** in accordance with s 54R(3)(b) of the **Act**; or
    - (iii) **Commission** in accordance with any input methodology determined pursuant to s 54S of the **Act**.
- (4) If clause 2.1.1(3) applies, where a cost relates to both electricity transmission services and other services supplied by Transpower, only the proportion of the cost attributable to the supply of electricity transmission services (as determined in accordance with clause 2.1.1), may be a recoverable cost.
- (4) In this clause, 'Act' and 'regulations' have the same meanings as defined in s 29 of the Interpretation Act 1999.

# SUBPART 2 -Cost allocation

#### 3.2.1 Cost allocation

- (1) For the purpose of making an **IPP determination**, information provided to the **Commission** by **Transpower** regarding **Transpower's operating costs** and **capital expenditure**, whether actual or forecast, must be provided in accordance with clause 2.1.1 with necessary modifications.
- (2) For the avoidance of doubt, in applying subclause (1), any reference to 'any requirement in an **ID determination**' in Subpart 1 of Part 2 means 'any requirement specified by the **Commission**'.

#### SUBPART 3 Asset valuation

#### 3.3.1 Asset valuation

For the purpose of making an IPP determination-

(a) the value of an asset; and

(b) any allowance for depreciation; and (b)(c) the treatment of revaluation,

must be determined in accordance with the **input methodologies** specified in Subpart 2 of Part 2, <u>subject towith necessary modifications to allow</u>-

- (d) the necessary modifications to allow-
  - (i) the values or allowances to be calculated on a forecast basis where required; and
  - (ii) for the purposes of determining forecast MAR and associated annual wash-ups, the determination of the value of commissioned asset by reference to approved amounts of capital expenditure;
- (e) clause 3.3.2; and
- (f) any other necessary modifications.
- (c) such values or allowances to be calculated on a forecast basis where required; and

for the purposes of determining forecast MAR and associated annual washups, the determination of the value of commissioned asset by reference to approved amounts of capital expenditure.

#### 3.3.2 Depreciation – alternative depreciation method

- (1) Depreciation and, subject to subclause (2), unallocated depreciation may be determined in respect of a regulatory period using an alternative depreciation method, provided the Commission is satisfied that the result of applying the alternative depreciation method would better promote the purpose of Part 4 of the Act than the result of applying the standard depreciation method.
- (2) <u>Clause 2.2.6 applies with any necessary modifications to unallocated depreciation</u> determined by applying an alternative depreciation method.

# **SUBPART 4** Treatment of taxation

#### 3.4.1 Treatment of taxation

- (1) For the purpose of making an **IPP determination**, **Transpower's regulatory tax allowance** whether on an actual or forecast basis, must be determined in accordance with the **input methodologies** specified in Subpart 3 of Part 2 with necessary modifications.
- (2) For the avoidance of doubt, in applying subclause (1), 'as determined in accordance with an **ID** determination' in clause 2.3.1(2) must be construed as 'as specified by the **Commission**'.

# SUBPART 5 Cost of capital

# 3.5.1 Methodology for estimating weighted average cost of capital

- (1) The **Commission** will determine a mid-point estimate of vanilla **WACC**-
  - (a) as of the first **business day** of the month 7 months prior to the start of each **regulatory period**;
  - (b) in respect of the regulatory period term for that regulatory period 5year period;

- (c) no later than 6 months prior to the start of each regulatory period; and
- (d) in accordance with the formula-

$$r_d L + r_e (1 - L)$$
.

- (2) The **Commission** will determine a mid-point estimate of post-tax **WACC**
  - (a) as of the first business day of the month 7 months prior to the start of each regulatory period;
  - (b) in respect of the regulatory period term for that regulatory period 5year period;
  - (c) no later than 6 months prior to the start of each regulatory period; and
  - (d) in accordance with the formula-

$$r_d (1 - T_c)L + r_e (1 - L).$$

(3) In this clause-

L is **leverage**;

 $r_d$  is the cost of debt and is estimated in accordance with the formula:

$$r_f + p + d$$
;

 $r_e$  is the cost of equity and is estimated in accordance with the formula:

$$r_f(1 - T_i) + \theta_e TAMRP;$$

 $T_c$  is the average corporate tax rate;

 $r_f$  is the risk-free rate;

p is the average debt premium;

d is the debt issuance costs;

 $T_i$  is the average investor tax rate;

 $\theta_e$  is the equity beta; and

TAMRP is the tax-adjusted market risk premium.

- (4) For the purpose of this clause-
  - (a) the fixed WACC parameters comprising <u>leverage</u>, average investor tax rate, <u>the average corporate tax rate</u>, equity beta, the debt issuance costs and tax-adjusted market risk premium are the values specified in or determined in accordance with clause 3.5.2;
  - (b) the risk-free rate must be estimated for the first business day of the month 7 months preceding the start of the regulatory period in accordance with clause 3.5.3; and
  - (c) the amount of the average debt premium must be estimated for the first business day of the month 7 months preceding the start of the regulatory period in accordance with clause 3.5.4.

#### 3.5.2 Fixed WACC parameters

(1) Leverage is 4<u>1</u><del>2</del>%.

- 'Average investor tax rate' is the average of the investor tax rates that, as at the date that the estimation is made, will apply to each of the **disclosure years** in the <del>5 year period commencing on the first day of the regulatory period in question</del>.
- (3) For the purpose of subclause (2), 'investor tax rate' is, for each **disclosure year**, the maximum **prescribed investor rate** that, as at the date that the estimation is made, will apply at the start of the **regulatory period** to an individual who is-
  - (a) resident in New Zealand; and
  - (b) an investor in a multi-rate PIE.
- (4) 'Equity beta' is 0.5960.
- (5) 'Debt issuance costs' are 0.2% where the regulatory period term is five years and 0.25% where the regulatory period term is four years.
- (6) 'Tax-adjusted market risk premium' is, for a 5 year period commencing on the first day of the regulatory period, 7.0%.
- (6)(7) The 'average corporate tax rate' is the average of the **corporate tax rates** that, as at the date that the estimation is made, will apply during the **regulatory period** commencing on the first day of the **regulatory period** in question.

#### 3.5.3 Methodology for estimating risk-free rate

The Commission will estimate a risk-free rate-

- (a) as of the first **business day** of the month 7 months prior to the start of each **regulatory period**;
- (b) in respect of the regulatory period term for that regulatory period 5year period; and
- (c) no later than 6 months prior to the start of each regulatory period,

by-

- (d) obtaining, for notional benchmark New Zealand government New Zealand dollar denominated nominal bonds the wholesale market linearly-interpolated bid yield to maturity, for a residual period to maturity equal to the regulatory period term 5 years on each business day in the 3 month period of 8 to 10 months prior to the start of each regulatory period;
- (e) calculating the annualised interpolated bid yield to maturity for each **business day**; and
- (f) calculating the unweighted arithmetic average of the daily annualised interpolated bid yields to maturity.

#### 3.5.4 Methodology for estimating average debt premium

- (1) The **Commission** will determine an estimate of an amount for the **average debt** premium-
  - (a) for each **regulatory period**; and
  - (b) no later than 6 months prior to the start of each **regulatory period**.
- (2) For the purpose of subclause (1), 'average debt premium' means the simpleunweighted arithmetic average of the five **debt premium** values estimated in accordance with clause 2.4.4(56) for-
  - (a) the current debt premium reference year; and
  - (b) the four previous **debt premium reference years**.

- (3) For the debt premium reference year 2017 or earlier, the following debt premium values apply-
  - (a) 2013 = 2.24%;
  - (b) 2014 = 2.04%;
  - (c) 2015 = 1.76%:
  - (d) 2016 = 1.59%; and
  - (e) 2017 = 1.59%.
- 3.5.5 Methodology for estimating 657th percentile of vanilla and post-tax WACC
- (1) The **Commission** will determine a 65-7th percentile estimate of vanilla **WACC**-
  - (a) for each regulatory period; and
  - (b) no later than 6 months prior to the start of each **regulatory period**.
- (2) The Commission will determine a 657<sup>th</sup> percentile estimate of post-tax **WACC**-
  - (a) for each regulatory period; and
  - (b) no later than 6 months prior to the start of each regulatory period.
- (3) For the purposes of subclause (1) or (2), the 657th percentile must be determined in accordance with the formula-

mid-point estimate of WACC +  $0.385440 \times standard error$ ,

where the **standard error** of the **mid-point estimate of WACC** is 0.0101.

#### 3.5.6 Publication of estimates

The **Commission** will publish all determinations and estimates that it is required to make by this subpart-

- (a) on its website; and
- (b) no later than 1 month after having made them.

#### 3.5.7 Use of published estimates of WACC

For the purpose of setting a price path in an **IPP determination**, the **WACC** published under clause 3.5.6 most recently prior to the start of the **regulatory period** in question must be applied in respect of each **disclosure year** commencing in the **regulatory period**.

- 3.5.8 Methodology for estimating term credit spread differential
- (1) This clause applies to the determination of the amount of any **term credit spread differential** in respect of a **qualifying debt** for the purpose of determining a **term credit spread differential allowance** in an **IPP determination**.
- (2) The **Commission** will only determine a **term credit spread differential allowance** if **Transpower's** debt portfolio, as at the date of its most recently published audited financial statements, has a weighted average original tenor greater than 5 years.
- (3) Term credit spread differential is the amount determined in accordance with the formula-

$$(A \div B) \times C \times D$$
,

where-

- (a) 'A' is the sum of the **term credit spread difference** and debt issuance cost re-adjustment;
- (b) 'B' is the book value of **Transpower's** total interest-bearing debt as at the balance date of **Transpower's** financial statements audited and published most recently before the **IPP determination** is made;
- (c) 'C' is **leverage**; and
- (d) 'D' is the average of-
  - (i) the sum of opening RAB values; and
  - (ii) the sum of closing RAB values.
- (4) For the purpose of subclause (3)(a), the 'debt issuance cost re-adjustment' is determined in accordance with the formula-

 $(0.01 \div original\ tenor\ of\ the\ qualifying\ debt$  -  $0.002) \times book\ value\ in\ New\ Zealand\ dollars\ of\ the\ qualifying\ debt\ at\ its\ date\ of\ issue,$ 

which amount, for the avoidance of doubt, will be a negative number.

# SUBPART 6 Incremental rolling incentive scheme

#### SECTION 1 Annual IRIS incentive amounts for operating expenditure

- 3.6.1 Calculation of annual IRIS incentives for operating expenditure as recoverable costs
- (1) **Transpower** must calculate an **opex incentive amount** for each **disclosure year** of each **regulatory period**, subject to subclause (2).
- (2) **Transpower** shall not calculate an **opex incentive amount** for any **disclosure year** commencing prior to 1 April 2020.
- 3.6.2 How to calculate opex incentive amounts
- (1) The 'opex incentive amount' for a **disclosure year** is an amount equal to the sum of—
  - (a) all **amounts carried forward** into that **disclosure year** from a **disclosure year** in a preceding **regulatory period**; and
  - (b) where an base year adjustment to the opex incentive is applicable under clause 3.6.4(1)-

the amount calculated in accordance with the following formula for a disclosure year in the regulatory period-

$$\left(\frac{Adjustment\ to\ the\ opex\ incentive}{l-1}\right)\times (1+r)^{y-1}$$

where-

- I is the number of disclosure years in the regulatory period;
- r is the **cost of debt** applying to the **IPP** in question; and
- y is the number of **disclosure years** preceding the **disclosure year** in question in the **regulatory period**.
- 3.6.3 How to calculate the amount carried forward to subsequent disclosure years
- (1) An 'amount carried forward' must be calculated for each **disclosure year** of a **regulatory period**, subject to subclause (5).
- (2) The 'amount carried forward' for the first **disclosure year** of a **regulatory period** is calculated in accordance with the formula—

#### forecast opex $_t$ – actual opex $_t$

where-

- t means the **disclosure year** in question.
- (3) The 'amount carried forward' for a **disclosure year** that is not the first or last **disclosure year** of a **regulatory period** is calculated in accordance with the formula—

(forecast opex<sub>t</sub> – actual opex<sub>t</sub>) – (forecast opex<sub>t-1</sub> – actual opex<sub>t-1</sub>) where–

- t means the **disclosure year** in question; and
- *t-1* means the **disclosure year** preceding the **disclosure year** in question.
- (4) The 'amount carried forward' for the last **disclosure year** of a **regulatory period** is nil.
- (5) **Transpower** shall not calculate an **amount carried forward** for any **disclosure year** commencing prior to 27 November 2014.
- (6) Each **amount carried forward** is notionally carried forward from the **disclosure year** in respect of which it is calculated into each of the subsequent 5 **disclosure years**.
- (7) 'Forecast opex', subject to clause 3.6.5, is, for a **disclosure year**, the amount of forecast **operating expenditure** specified by the **Commission** for the relevant **disclosure year** in an **IPP determination** for the purpose of calculating an **opex incentive amount**, adjusted for any difference, for each quarter, between:
  - (a) the forecast CPI used to calculate forecast MAR for the disclosure year; and (a)(b) actual CPI.

(7)(8) 'Actual opex' is the sum of-

- (a) any **operating costs** allocated to **electricity transmission services** for the relevant **disclosure year** calculated in accordance with Part 2; and
- (b) any lease payments allocated to electricity transmission services other than system operator services for the relevant disclosure year.
- 3.6.4 How to calculate a base yearthe adjustment to the opex incentive in the second year of a regulatory period
- (1) An adjustment to the opex incentive must be calculated for the second disclosure vear of the regulatory period in accordance with the formula—

base year adjustment term + baseline adjustment term.

(2)(1) A base year adjustment to the opex incentive must be calculated for the second disclosure year of the regulatory period The 'base year adjustment term' is calculated in accordance with the following formula—

$$-\left(\frac{(\text{forecast opex}_{t-1} - \text{actual opex}_{t-1}) - (\text{forecast opex}_{t-2} - \text{actual opex}_{t-2})}{(1 + WACC)^4}\right)$$

where-

WACC

means the <u>mid-point estimate of vanilla</u> 67<sup>th</sup> percentile estimate of WACC as determined by the Commission <u>under clause 3.5.1(1)</u> and as applied by the Commission in determining the price path for Transpower's current IPP;

- *t-1* means the **disclosure year** immediately prior to the current **regulatory period**; and
- *t-2* means the **disclosure year** commencing two years prior to the current **regulatory period**.
- (3) The 'baseline adjustment term' is calculated in accordance with the formula—

- (differences in penultimate year)

×

<del>((1-(1+WACC)-6)/WACC)</del>

×

(1+WACC)2

where-

differences in penultimate year means the amount calculated in accordance with subclause (4); and

WACC means the WACC as determined by the Commission and applicable to Transpower's current regulatory period.

(4) 'Differences in penultimate year' is an amount determined by the Commission, having regard to the views of interested persons, that is the difference between forecast opex and actual opex in the penultimate year of the preceding regulatory period, minus any amount resulting from savings that occurred in the preceding years of the regulatory period. For the purpose of this definition, savings can be both negative and positive. The amount so determined is to be notified to Transpower.

#### SECTION 2 Price-quality path amendments and other events

- 3.6.5 Calculating incentive adjustments for IPP amendments and other events
- (1) Where an IPP is amended following-
  - (a) a catastrophic event;
  - (b) a change event;
  - (c) an **error event**; or
  - (d) the discovery provision of false or misleading information,

the **forecast opex** required to be used by **Transpower** to calculate the **amount** carried forward for the disclosure year in which the event occurred and each subsequent disclosure year prior to the effective date of the amendment to the IPP, is the amount specified by the **Commission** in the amended IPP.

- (2) Where an alteration to Part 2 or an **ID determination** requirement affecting the quantification of **operating costs** allocated to **electricity transmission services** after the application of clause 2.1.1(1) occurs in a **disclosure year** and—
  - (a) the **Commission** considers; or
  - (b) **Transpower** satisfies the **Commission** upon application, that the alteration has, or is likely to have, a material effect on the calculation of the **opex incentive amount** that would otherwise have been calculated by **Transpower**, then the **forecast opex** required to be used by **Transpower** to

calculate the **amount carried forward** for that **disclosure year** and each subsequent **disclosure year** in the **regulatory period** may be determined by the **Commission**, and notified to **Transpower**, in order to preserve, to the extent appropriate—

- (c) the correct outcomes for expenditure efficiencies achieved before the event; and
- (d) the relevant incentive properties after the event.

# **SECTION 3** Transitional provisions

- 3.6.6 Determination of amount to be taken into account as a recoverable cost
- (1) Each **incremental change** and **incremental adjustment term** is carried forward from the **disclosure year** in respect of which it was determined into each of the subsequent 5 **disclosure years** by applying the **inflation rate**.
- (2) In each of the **disclosure years** into which an amount has been carried under subclause (1), a net balance must be determined by addition of-
  - (a) any incremental changes carried forward into that disclosure year; and
  - (b) any incremental adjustment term carried into that disclosure year.

#### SUBPART 7 Reconsideration of thean individual price-quality path

#### **SECTION 1** When Commission can reconsider the IPP

- 3.7.1 When the IPP may be amended
- (1) The **Commission** may amend the **IPP** if the **Commission** is satisfied that-
  - (a) a reopener event has occurred;
  - (b) the IPP should be amended, after having regard to at least the matters in clause 3.7.10; and
  - (c) the amendment to the **IPP** is consistent with clause 3.7.11.
- (2) A 'reopener event'-
  - (a) is an event of one of the following types, or a series of those events, that occurs after the date that is 12 months before the start of the **regulatory** period-
    - (i) a catastrophic event;
    - (ii) a change event;
    - (iii) an error event; or
    - (iv) the discovery of false or misleading information; or
  - (b) occurs when-
    - (i) Transpower forecasts that a large buildup in EV account balance is likely to occur in the regulatory period and the criteria in clause 3.7.8(2) are met; or
    - (ii) Transpower applies on the basis that for 2 or more E & D projects have become reasonably likely to commence in the regulatory period and the criteria in clause 3.7.9(4) are met.
- 3.7.2 Process for the reconsideration of the IPP
- (1) A reopener event can be nominated:

- (a) in the case of a large buildup in EV account balance or 2 or more E & D projects, by Transpower applying; and
- (b) in any other case, by-
  - (i) the **Commission**; or
  - (ii) Transpower, by notifying the Commission.
- (2) The **Commission** or **Transpower** may nominate more than one **reopener event** at the same time.
- (3) If **Transpower** nominates a **reopener event**, it must provide sufficient information to enable the **Commission** to assess:
  - (a) whether a **reopener event** has occurred;
  - (b) having regard to at least the matters in clause 3.7.10(1), whether and how the **IPP** should be amended; and
  - (c) whether any proposed amendment to the **IPP** is consistent with clause 3.7.11 and the **Act**.
- (4) The **Commission** must publish a notice on its website of each of the following matters as soon as practicable after they occur:
  - (a) a reopener event is nominated; and
  - (b) the Commission decides whether or not-
    - (i) it is satisfied that a reopener event has occurred;
    - (ii) to reconsider the **IPP**; and
    - (iii) to amend the IPP.

#### 3.7.3 Confidential information

- (1) Where **Transpower** considers that it has a right to confidentiality in any information that it provides to the **Commission** in relation to this subpart and it does not waive the right, it must:
  - (a) include that information in an appendix; and
  - (b) clearly mark the information as confidential.
- (2) Subclause (1) does not prevent the **Commission** from publishing information identified in accordance with that subclause if it considers **Transpower** does not have a right to confidentiality in respect of that information.
- (3) Subclause (2) does not affect any of **Transpower's** rights or remedies for breach of any right to confidentiality.

#### **SECTION 2** Events that may be reopener events

#### 3.7.13.7.4 Catastrophic event

- (1) A 'Catastrophic event' ismeans an event-
  - (a) beyond the reasonable control of **Transpower**;
  - (b) that could not have been reasonably foreseen by Transpower at the time the most recent IPP determination was determined made; and
  - (c) in respect of for which-
    - (i) action required to rectify its adverse consequences cannot be delayed until a future **regulatory period** without the **grid outputs** associated with the **revenue-linked grid output measures** being

- outside the range specified by the relevant **cap** and **collar** in the remaining **disclosure years** of the **regulatory period**;
- (ii) remediation requires <u>capex</u>, <u>opex</u>, <u>or both</u> <u>either or both of capital</u> <u>expenditure or operating expenditure</u> during the <u>regulatory period</u>;
- (iii) the full costs of remediation costs are not provided for in theat IPP determination; and
- (iv) the cost of remediation net of any insurance or compensatory entitlements exceeds \$5 millionhas had or will have an impact on the price path over the disclosure years of the IPP remaining on and after the first date at which a remediation cost is proposed to be or has been incurred, by an amount at least equivalent to 1% of the aggregated forecast MARs for the disclosure years of the IPP in which the cost was or will be incurred.

# 3.7.2 Change event

- (1) A 'Cchange event' occurs where there is a change of the type described in subclause (2) or (3), the effect of which is not explicitly or implicitly provided for in the IPP.
- (2) The first type is a change in a regulatory or legislative requirement that applies to

  Transpower as a result of new or amended legislation, or judicial clarification of the interpretation of legislation, that-
  - (a) results in additional reasonable costs (whether capex, opex, or both) to respond to the changed requirement that exceed \$5 million; or
  - (b) causes an **input methodology** to become incapable of being applied.
- (3) The second type is a change in a requirement that applies to **Transpower** under **GAAP**, that-
  - (a) results in a change in the recognition or measurement (including timing) of 1 or more of the following:
    - (i) **opex**;
    - (ii) capex;
    - (iii) assets;
    - (iv) liabilities;
    - (v) forecast MAR;
    - (vi) actual transmission revenue; or
    - (vii) taxation; and
  - (b) if in effect at the time the IPP was determined, would have caused the aggregate amount of the forecast MAR for all pricing years of the regulatory period to have differed by an amount that exceeds \$5 million as a result of a difference in the forecast amounts or values relied on in setting the price path.
- (1) means-
  - (a) change in a; or
  - (b) a new,

legislative or regulatory requirement applying to **Transpower** the effect of which-

(c) must take place during the current regulatory period;

- (d) is not explicitly or implicitly provided for in the IPP; and either-
- (e) necessitates incurring additional reasonable costs in responding to the change or new requirement that has had or will have an impact on the price path of the disclosure years of the regulatory period in which the change or new requirement applies of at least 1% of the aggregate amount of the forecast MARs for the disclosure years in which the net costs are or will be incurred; or
- (f) causes an input methodology to become incapable of being applied.

#### 3.7.3 Error event

- (1) An 'Eerror event' is means, subject to subclause (2), a clearlyan unintended circumstance identified by the Commission where the IPP was determined or amended based on an error, including where:
  - (a) incorrect data wereas used in determiningsetting the price path, revenuelinked grid output measurerevenue linked grid output measure, or a quality standard; or
  - (b) data wereas incorrectly applied in determiningsetting the price path, revenue-linked grid output measure revenue-linked grid output measure, or a quality standard.
- (2) For the purposes of subclause (1), an error relating to-
  - (a) an error relating to the IPP does the price path will not constitute an error event unless the error has an impact on the forecast MAR that exceeds \$100,000 for the affected pricing years of the IPP price path of an amount equivalent to at least 1% of the aggregate forecast MAR for the affected disclosure years of the IPP; and
  - (b) an error relating to the the metrics by which quality standards or grid output measures are specified in the IPP doeswill not constitute an error event unless it is an error in the value of the metric; and
  - (c) a discrepancy between forecast values and actual values does not constitute an **error event**.

# 3.7.7 False or misleading information

- (1) This subpart applies to 'false or misleading information'-
  - (a) relating to the making or amending of the IPP determination that has been-
    - (i) provided by **Transpower** or its agents to the **Commission**; or
    - (ii) disclosed pursuant to an **ID determination** or information disclosure requirements under subpart 3 of Part 4A of the **Act** (as continued in force for a time by s 54W of the **Act**); and
  - (b) that the **Commission** relied on in making or amending the **IPP** determination.

#### 3.7.8 Large buildup in EV account balance

- (1) A 'large buildup in EV account balance' is a situation where the EV account balance would be, as of the last day of a regulatory period, when divided by the number of years in that regulatory period, greater than 10% of the forecast SMAR for the final pricing year in that regulatory period.
- (2) The criteria referred to in clause 3.7.1(2)(b)(i) are-
  - (a) Transpower must apply for amendment of the IPP in respect of the large buildup in EV account balance;
  - (b) the application must relate to remaining complete **pricing years** in the regulatory period;
  - (c) the application must be made-
    - (i) if the **regulatory period** is longer than 4 years, in the period of 80 working days that commences after the end of the third disclosure year commencing in the **regulatory period**; and
    - (ii) in any other case, in the period of 80 working days that commences after the end of,-
      - (A) the first disclosure year commencing in the regulatory period; or
      - (B) the second disclosure year commencing in the regulatory period; and
  - (d) the application must include a proposed amendment to the **forecast SMAR** in respect of the remaining complete **pricing years**.

#### 3.7.9 Enhancement and Development project

- (1) An 'E & D project' is-
  - (a) an unforeseeable E & D project; or
  - (b) a foreseeable E & D project.
- (2) An 'unforeseeable E & D project' is an **E & D base capex project** or an **E & D non-**<u>transmission solution</u>, where, in relation to a <u>regulatory period</u>:
  - (a) at the time the IPP determination was made for that regulatory period, an allowance for that project or solution was not included in the base capex allowances or in the opex allowance specified by the Commission in the IPP determination for that regulatory period because:
    - (i) the **project** or solution was not forecast to commence in that regulatory period; and
    - (ii) it was reasonably unforeseeable that the **project** or solution was likely to commence during that **regulatory period**;
  - (b) Transpower can demonstrate that the project or solution has become reasonably likely to commence in that regulatory period; and
  - (c) drivers of the **project** or solution include one or more of the following:
    - (i) a step change in demand that necessitates a capacity upgrade in the grid;
    - (ii) a generation **commissioning** or generation **decommissioning**;
    - (iii) meeting grid reliability standards or reliability service levels agreed between Transpower and its customer;

- (iv) ensuring power quality complies with regulatory or legislative requirements;
- (v) managing the power system dynamic voltage response to disturbances; or
- (vi) any other development caused by a party outside the control of

  Transpower that requires a transmission network enhancement or
  transmission network development.
- (3) A 'foreseeable E & D project' is an **E & D base capex project** or an **E & D non-transmission solution** where, in relation to a **regulatory period**;
  - (a) at the time the IPP determination was made for that regulatory period, an allowance for that project or solution was not included in the base capex allowances or in the opex allowance specified by the Commission in the IPP determination for that regulatory period, and it would have been unreasonable to expect Transpower to have accurately forecast the expenditure, or timing of, the project or solution at the time the IPP determination was made;
  - (b) Transpower can demonstrate that the project or solution has become reasonably likely to commence in that regulatory period; and
  - (c) drivers of the **project** or solution include one or more of the following:
    - (i) a step change in demand that necessitates a capacity upgrade in the **grid**;
    - (ii) a generation **commissioning** or generation **decommissioning**;
    - (iii) meeting grid reliability standards or reliability service levels agreed between Transpower and its customer;
    - (iv) ensuring power quality complies with regulatory or legislative requirements;
    - (v) managing the power system dynamic voltage response to disturbances; or
    - (vi) any other development caused by a party outside the control of

      Transpower that requires a transmission network enhancement or transmission network development.
- (4) The criteria referred to in clause 3.7.1(2)(b)(ii) are-
  - (a) Transpower must apply for amendment of the IPP in respect of the E & D projects;
  - (b) Transpower must not have previously applied in the regulatory period for amendment of the IPP in respect of E & D projects;
  - (c) the application must include an explanation of:
    - (i) the reasons why the **E & D projects** have become reasonably likely to commence in the **regulatory period**;
    - (ii) the drivers of each of the **E & D projects** in accordance with subclause (2)(c) or (3)(c) (or both); and
    - (iii) supporting analysis for the explanations for the matters in subparagraphs (i) and (ii),

that is commensurate with the estimated expenditure and complexity of each of the **E & D projects** that is the subject of the application; and

(b)(d) the total forecast value of the **E & D projects**, in aggregate, amounts to at least \$20 million.

# 3.7.3A Large buildup in EV account balance

'Large buildup in EV account balance' means a situation where the EV account balance would be, as of the last day of a regulatory period, when divided by the number of years in that regulatory period, greater than 10% of the forecast SMAR for the final pricing year in that regulatory period.

#### 3.7.3B Enhancement and Development Projects

- (1) 'Enhancement and Development Projects' means either an Unforeseeable

  Enhancement and Development Project as specified in subclause (2) or a

  Foreseeable Enhancement and Development Project as specified in subclause (3).
- (2) 'Unforeseeable Enhancement and Development Project' means an E & D base capex project where, in relation to a regulatory period:
  - (a) at the time the IPP determination was made for that regulatory period, an allowance for that E & D base capex project was not included in the base capex allowances for that regulatory period because:
    - (i) the E & D base capex project was not forecast to commence in that regulatory period; and
    - (ii) it was reasonably unforeseeable that the E & D base capex project was likely to commence during that regulatory period;
  - (b) Transpower can demonstrate that the E & D base capex project has become reasonably likely to commence in that regulatory period; and
  - (c) drivers of the **E & D base capex project** include one or more of the following:
    - (i) a step change in demand that necessitates a capacity upgrade in the grid;
    - (ii) a generation commissioning or generation decommissioning;
    - (iii) meeting grid reliability standards or reliability service levels agreed between Transpower and its customer;
    - (iv) ensuring power quality complies with regulatory or legislative requirements;
    - (v) managing the power system dynamic voltage response to disturbances; or
    - (vi) any other development caused by a party outside the control of Transpower that requires a transmission network enhancement or transmission network development.
- (3) 'Foreseeable Enhancement and Development Project' means an **E & D base** capex project where, in relation to a regulatory period:
  - (a) at the time the IPP determination was made for that regulatory period, an allowance for that E & D base capex project was not included in the base capex allowances for that regulatory period, and it would have been unreasonable to expect Transpower to have accurately forecast the

- capital expenditure, or timing of, the E & D base capex project at the time the IPP determination was made:
- (b) Transpower can demonstrate that the E & D base capex project has become reasonably likely to commence in that regulatory period; and
- (c) drivers of the **E & D base capex project** include one or more of the following:
  - (i) a step change in demand that necessitates a capacity upgrade in the grid;
  - (ii) a generation commissioning or generation decommissioning;
  - (iii) meeting grid reliability standards or reliability service levels agreed between Transpower and its customer;
  - (iv) ensuring power quality complies with regulatory or legislative requirements;
  - (v) managing the power system dynamic voltage response to disturbances; or
  - (vi) any other development caused by a party outside the control of Transpower that requires a transmission network enhancement or transmission network development.

#### SECTION 3 Commission consideration of whether and how to amend the IPP

#### 3.7.10 Comission consideration of whether to amend the IPP

- (1) If the Commission is satisfied that a reopener event has occurred, then the

  Commission must have regard to at least the following matters when deciding whether to amend the IPP:
  - (a) the impact of the **reopener event** given the relevant circumstances, including both positive and negative effects, on **Transpower's** costs, revenues, and quality outcomes;
  - (b) the extent to which the IPP provides explicitly or implicitly for the reopener event;
  - (c) if **Transpower** nominated the **reopener event**:
    - (i) whether the action required to respond to the reopener event's
       adverse consequences can be delayed until a future regulatory
       period;
    - (ii) the extent to which **Transpower**:
      - (A) contributed to the adverse consequences of the **reopener event** by its action or omission; and
      - (B) could have prevented or overcome the adverse consequences of the reopener event by exercising reasonable diligence at reasonable cost; and
    - (iii) whether **Transpower's** planned **capex** and **opex** for the remainder of the **regulatory period** have been appropriately reviewed and reprioritised; and
  - (d) in the case of a **catastrophic event**, the extent to which **Transpower** has demonstrated that it has reviewed its planned **capex** and **opex** for the remainder of the regulatory period and made such substitutions as are

# possible without adversely affecting its ability to meet the grid output targets associated with revenue-linked grid output measures.

- (2) Subclause (1)(d) does not limit subclause (1)(c)(iii).
- 3.7.11 Amending IPP after reconsideration
- (1) If the Commission decides that the IPP should be amended, the Commission may amend any 1 or more of the following that are specified in the IPP determination:
  - (a) price path;
  - (b) grid output targets;
  - (c) **caps**;
  - (d) collars; and
  - (e) grid output incentive rates associated with revenue-linked grid output measures.
- (2) The **Commission** will not amend the **IPP**-
  - (a) in the case of large buildup in EV account balance, more than is reasonably necessary to take account of the change in forecast EV adjustment on the basis of the buildup; and
  - (b) in any other case,-
    - (i) more than is reasonably necessary to mitigate the effect of the reopener event on the IPP;
    - (ii) more than is reasonably necessary to take account of the change resulting from the **reopener event** net of any insurance or compensatory entitlements; and
    - (iii) by more than the prudent net additional expenditure incurred in responding to the **reopener event**.
- (3) In the case of a **catastrophic event**, the **Commission** will not amend the price path to the extent the costs to rectify the adverse consequences of the event are covered by the **IPP** or by commercial insurance held by **Transpower**.

#### SECTION 4 Amendment of IPP for approved capex

- 3.7.12 Consideration for approved capex
- 1) Once in each disclosure year commencing in a regulatory period except for the last disclosure year, the Commission must reconsider (and, if necessary, amend) the IPP in respect of the remaining disclosure years commencing in the regulatory period to take account of the following on the forecast SMAR:
  - (a) the revenue impact of major capex approved by the Commission; and
  - (b) the revenue impact of any base capex approved by the Commission for a listed project.
- 3.7.4 When price quality paths may be reconsidered
- (1) Transpower's IPP may be reconsidered by the Commission if-
  - (a) the Commission considers, or Transpower applies to the Commission and satisfies the Commission, that-
    - (i) subject to subclause (2), a catastrophic event has occurred;
    - (ii) there has been an error event:

- (iii) a change event has occurred;
- (iv) false or misleading information has been provided;
- (v) subject to subclause (5), a large buildup in EV account balance is likely to occur; or
- (vi) subject to subclauses (6) and (7), two or more Enhancement and Development Projects have become reasonably likely to commence in the regulatory period.
- (2) For the purpose of subclause (1)(a)(i), where the costs to rectify the adverse consequences of a catastrophic event are fully covered by-
  - (a) the IPP (e.g. through an operating expenditure allowance for self-insurance); or
  - (b) commercial insurance held by Transpower,

the Commission will only reconsider the grid output targets, caps, collars, and grid output incentive rates associated with revenue linked grid output measures.

- (3) For the purpose of subclause (1)(a)(iv), 'false or misleading information' means-
  - (a) false or misleading information relating to the making or amending of an IPP determination has been knowingly-
    - (i) provided by Transpower or any of its agents to the Commission; or
    - (ii) disclosed pursuant to an ID determination or information disclosure requirements under Subpart 3 of Part 4A of the Act, as continued in force by s 54W of the Act; and
  - (b) the Commission relied on that information in making an IPP determination.
- (4) The Commission must reconsider, in each disclosure year commencing in a regulatory period, save the last disclosure year, the IPP in respect of the remaining disclosure years commencing in the regulatory period to take account of
  - (a) the revenue impact of major capex approved by the Commission; and
  - (b) the revenue impact of any base capex approved by the Commission for a listed project.

# on the forecast SMAR.

- (5) For the purpose of subclause (1)(a)(v), **Transpower** may only apply for reconsideration of an **IPP** on the basis of a **large buildup** in **EV** account balance if a forecast that a large buildup in **EV** account balance is likely to occur is made prior to the commencement of a **pricing year** in a **regulatory period**, and that application must:
  - (a) relate to remaining complete pricing years in a regulatory period;
  - (b) include a proposed amendment to the forecast SMAR in respect of the remaining complete pricing years in a regulatory period; and
  - (c) be made to the **Commission** within the period of 80 **working days** after the end of
    - (i) the first or second disclosure year commencing in that regulatory period, in respect of remaining complete pricing years of that regulatory period; or

- (ii) the third disclosure year commencing in that regulatory period, in respect of the final pricing year of that regulatory period, where the regulatory period is more than 4 years.
- (6) For the purposes of subclause (1)(a)(vi), Transpower may only apply once during a regulatory period for reconsideration of an IPP in respect of Enhancement and Development Projects, and that application must:
  - (a) be made to the **Commission** no later than the end of the second disclosure year commencing in that regulatory period; and
  - (b) include:
    - (i) an explanation of why the Enhancement and Development Projects have become reasonably likely to commence in that regulatory period;
    - (ii) an explanation of the drivers of the E & D base capex project in accordance with either or both clauses 3.7.3B(2)(c) and 3.7.3B(3)(c); and
    - (iii) supporting analysis for the explanations described in subclauses (6)(b)(i) and (ii),

that is commensurate with the estimated capital expenditure and complexity of each Enhancement and Development Project that is the subject of the application.

- (7) For the purposes of subclause (1)(a)(vi), the total forecast value of the Enhancement and Development Projects must, in aggregate, amount to at least \$20 million, where the two or more Enhancement and Development Projects may comprise either or both 'Unforeseeable Enhancement and Development Project' in accordance with clause 3.7.3B(2) or 'Foreseeable Enhancement and Development Project' in accordance with clause 3.7.3B(3).
- 3.7.5 Amending price quality path after reconsideration
- (1) Where, after reconsidering an IPP, the Commission determines that the IPP determination should be amended, the Commission may amend either or both of the price path or the grid output targets, caps, collars and grid output incentive rates associated with revenue-linked grid output measures, subject to subclauses (2), and (3) and (4).
- (2) Where, after reconsidering an IPP, the Commission determines that the IPP determination should be amended on the basis of any of clause 3.7.4(1)(a)(i) (iv), (vi) or clause 3.7.4(4), the Commission must not amend the
  - (a) price path; or
  - (b) grid output targets, caps, collars and grid output incentive rates associated with revenue-linked grid output measures,

more than is reasonably necessary to take account of the change in costs net of any insurance or compensatory entitlements, arising from:

- (c) the catastrophic event;
- (d) the change event;
- (e) the error event;
- (f) the provision of false or misleading information;
- (g) the amendment required to forecast SMAR in respect of

- (i) the revenue impact of major capex approved by the Commission; or
- (ii) the revenue impact of any base capex approved by the Commission for a listed project;
- (h) Enhancement and Development Projects,

as the case may be.

- (3) Where, after reconsidering an IPP, the Commission determines that the IPP determination should be amended on the basis of clause 3.7.4(1)(a)(v), the Commission must not amend the price path more than is reasonably necessary to take account of the change in forecast EV adjustment on the basis of a large buildup in EV account balance.
- (4) Where the Commission's reconsideration of the IPP was triggered by a catastrophic event, in determining the extent of the amendment required, the Commission will consider the extent to which Transpower has demonstrated that it has reviewed its capital expenditure and operating expenditure plans for the remainder of the regulatory period and made such substitutions as are possible without adversely affecting its ability to meet the grid output targets associated with revenue-linked grid output measures.

# SCHEDULE A STANDARD PHYSICAL ASSET LIVES

# **Standard Physical Asset Lives for Transpower**

ASSET DESCRIPTION	STANDARD <b>PHYSICAL</b> ASSET LIFE (YEARS)
Substations	55
Transformers	55
Oil Containment	45
Switchgear	45
Reactive Power Plant:	
220/110/66 kV Two Zone Bus Protection	15
22/11 kV Neutral Earthing Resistor	45
Transmission Lines	55