

## **Transpower Capital Expenditure Input Methodology (Principal Determination)**

This consolidated determination consolidates the principal determination as at 28 April 2026 and published on 4 June 2026.

This consolidated determination includes the input methodologies that apply for:

- information disclosure regulation from the commencement of disclosure year 2026;
- an individual price quality path which commenced on or after 1 April 2025; and
- any major capital expenditure proposal notified on or after 23 April 2026.

Publication date: 4 June 2026

Commerce Commission

Wellington, New Zealand

#### Status of this consolidated input methodologies determination

- We provide consolidated versions of the Commission's determinations for your reference and convenience. Consolidations are not the official versions. Official versions of Commission documents have a decision number and are signed by a member of the Commission.
- The official versions of the principal determination and the amendments incorporated into this consolidated version are available on the Commission's website:  
<https://www.comcom.govt.nz/regulated-industries/input-methodologies/input-methodologies-for-electricity-gas-and-airports/transpower-input-methodologies/>.
- The official versions of the determinations are also available for inspection at the Commission's office at Level 9, 44 The Terrace, Wellington, and printed copies may be purchased at a reasonable price.
- This consolidated determination includes the input methodologies that apply for:
  - information disclosure regulation from the commencement of disclosure year 2026;
  - an individual price quality path which commenced on or after 1 April 2025; and
  - any major capital expenditure proposal notified on or after 23 April 2026;

<b>Determination history</b>		
<b>Determination date</b>	<b>Decision number</b>	<b>Determination name</b>
31 January 2012	[2012] NZCC 2	Transpower Capital Expenditure Input Methodology Determination ('principal determination')
2 February 2012	n/a	Error correction: repaired reference links in clause D1(2)(b)
28 August 2014	[2014] NZCC 22	Transpower Input Methodologies Amendments Determination 2014
27 November 2014	[2014] NZCC 34	Transpower Input Methodologies Amendments Determination 2014 (No. 2)
5 February 2015	[2015] NZCC 3	Transpower Input Methodologies Amendment Determination 2015
25 May 2018	[2018] NZCC 8	Transpower Capital Expenditure Input Methodology Amendments Determination 2018
28 August 2019	[2019] NZCC 11	Transpower Capital Expenditure Input Methodology Amendments Determination 2019
13 November 2019	[2019] NZCC 17	Transpower Capital Expenditure Input Methodology Amendments Determination (No. 2) 2019
13 December 2023	[2023] NZCC 39	Transpower Capital Expenditure Input Methodology (IM Review) Amendment Determination 2023
11 December 2024	[2024] NZCC 40	Transpower Capital Expenditure Input Methodology (treatment of insurance entitlements) Amendment Determination 2024
28 April 2026	[2026] NZCC 9	Transpower Capital Expenditure Input Methodology (Major Capex Incentive Formula) Amendment Determination 2026

TRANSPower CAPITAL EXPENDITURE INPUT METHODOLOGY  
DETERMINATION

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## PART 1 GENERAL PROVISIONS

### 1.1.1 Title

This determination is the Transpower Capital Expenditure Input Methodology Determination.

### 1.1.2 Application

The **input methodology** in this determination applies to **electricity transmission services** in relation to **IPP** regulation under Subpart 7 of Part 4 of the **Act**.

### 1.1.3 Commencement

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

### 1.1.4 Transitional provisions

(1) A **major capex project** approved by-

- (a) the Electricity Commission under Part F of the Electricity Governance Rules 2003; or
- (b) the **Commission** in accordance with s 54R(3)(b) of the **Act**,

will be treated for the purposes of this determination as a **major capex project** that has been approved by the **Commission** under clause 3.3.5.

(2) Where subclause (1) applies, in treating the approval by the Electricity Commission or the **Commission** in question as an approval under clause 3.3.5-

- (a) the quantum of approved **major capex** is-
  - (i) the **major capex allowance**; or
  - (ii) **maximum recoverable costs**;

to the extent that the **major capex** relates to a **transmission investment** or **non-transmission solution** respectively;

- (b) any date specified as part of the approval as that on which the approval expires is the **approval expiry date**;
- (c) the quantum of any required outputs or deliverables are **approved major capex project outputs**;
- (d) any estimated cost adopted as part of approving the **major capex project** where the probability of the actual cost being lower than that estimated is 50% is the **P50**;
- (e) any forecast **commissioning date** of the **major capex project** adopted as part of approving the **major capex project** is the **commissioning date assumption**;

- (f) any forecast **completion date** in respect of a **non-transmission solution** adopted as part of approving the **major capex project** is the **completion date assumption**; and
- (g) any specification of the attribution of **major capex** in respect of a **non-transmission solution** as **recoverable costs** to one or more **disclosure years** is the **recovery scheme**.

1.1.5 Interpretation

- (1) In this determination-
  - (a) unless stated otherwise, references to Parts are to named and numbered parts 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;
  - (d) unless stated otherwise, any reference to an allowance, amount, cost, rate, sum or value is a reference to an allowance, amount, cost, rate, sum or value calculated in relation to **Transpower** in respect of a **disclosure year**; and
  - (e) any reference to a period of time must be interpreted in accordance with section 54 of the Legislation Act 2019.
- (2) In this determination, including in the schedules, the words or phrases in bold type bear the following meanings:

**A**

<b>Act</b>	means the Commerce Act 1986;
<b>actual FX rate</b>	means, in respect of each relevant currency, weighted average exchange rate obtained by <b>Transpower</b> in its foreign currency transactions for the <b>base capex</b> or <b>major capex</b> in question;
<b>adjusted low incentive rate base capex allowance</b>	means the value $b^*$ calculated as specified in clause B1(3);
<b>adjusted major capex allowance</b>	means the value $b$ calculated as specified in clause B3(3);
<b>adjusted standard incentive rate base capex allowance</b>	means the value $b$ calculated as specified in clause B1(2);
<b>ancillary service</b>	has the same meaning as ‘ancillary service’ is defined in the <b>code</b> ;

<b>annual compliance statement</b>	has the meaning specified in the <b>IPP determination</b> ;
<b>anticipatory connection asset</b>	has the same meaning as defined in the Transpower Input Methodologies Determination 2010;
<b>application submission date</b>	means the date by which <b>Transpower</b> plans to submit a <b>major capex proposal</b> ;
<b>approval expiry date</b>	means date on which the approval given by the <b>Commission</b> in respect of a <b>major capex project</b> under clause 3.3.5 expires;
<b>approval timeframe</b>	means a timeframe for the <b>Commission</b> to approve a <b>major capex project</b> or <b>staging project</b> under clause 3.3.5 or amend an existing approval of an <b>approved major capex project</b> under clause 3.3.6;
<b>approved major capex project</b>	means a <b>major capex project</b> or <b>staging project</b> approved by the <b>Commission</b> ;
<b>approved major capex project outputs</b>	means the <b>grid outputs</b> applying to an <b>approved major capex project</b> ;
<b>asset capability grid output measure</b>	means a <b>grid output measure</b> that- <ul style="list-style-type: none"> <li>(a) quantifies the capability or utilisation of the <b>grid</b>, whether at the level of- <ul style="list-style-type: none"> <li>(i) individual assets;</li> <li>(ii) an aggregation of assets, such as by substation; or</li> <li>(iii) the <b>grid</b>; and</li> </ul> </li> <li>(b) reflects the output or benefit (where 'benefit' may include a reduction in risk) delivered by investment in additional capacity to <b>supply electricity transmission services</b>;</li> </ul>
<b>asset health grid output measure</b>	means a <b>grid output measure</b> that- <ul style="list-style-type: none"> <li>(a) quantifies the fitness for service of the <b>grid</b>, whether at the level of- <ul style="list-style-type: none"> <li>(i) individual assets;</li> <li>(ii) an aggregation of assets, such as by substation; or</li> </ul> </li> </ul>

- (iii) the **grid**; and
- (b) reflects the output or benefit (where 'benefit' may include a reduction in risk) delivered by expenditure-
  - (i) on **asset refurbishment**;
  - (ii) on **asset replacement**; or
  - (iii) which is **operating expenditure**;

**asset performance measure** means a **grid output measure** that quantifies the performance, reliability or availability of the **grid**, whether at the level of-

- (a) individual assets;
- (b) an aggregation of assets, such as by substation; or
- (c) the **grid**;

**asset refurbishment** means work driven by **Transpower's policies** on a **project** or **programme** that refurbishes an asset, or component of an asset, and-

- (a) materially extends its original economic life; and
- (b) does not improve its original service potential,

save that it excludes any work to ensure that the asset or component is able to perform its designated function for its normal estimated operating life;

**asset replacement** means work driven by **Transpower's policies** on a **project** or **programme** that replaces substantially all of an asset, or component of an asset, where the replacement-

- (a) is required due to the condition or performance of that asset; and
- (b) does not materially improve the original service potential beyond that attributable to using modern equivalent assets;

## B

### base capex

means:

- (a) except for the purposes of clause B1 of Schedule B, **capital expenditure** that-
  - (i) is incurred in relation to one or more of:
    - (A) **asset replacement**;
    - (B) **asset refurbishment**;
    - (C) **business support**; and
    - (D) **information system and technology assets**; or
  - (ii) is not forecast to be **major capex**; and
- (b) for the purposes of clause B1 of Schedule B, **capital expenditure** as for paragraph (a), but excluding any **capital expenditure** that is incurred in relation to any **right-of-use asset**;

### base capex allowance adjustment mechanism

means a mechanism specified in an **IPP determination** which will adjust the **standard incentive rate base capex allowance** in respect of one or more **E & D base capex projects** or **E & D base capex programmes** upwards by pre-set amounts once defined thresholds are met based on one or more drivers of **base capex**;

### base capex allowances

mean the **low incentive rate base capex allowance** and **standard incentive rate base capex allowance**;

### base capex category

means a description of a category of **base capex** suitable for grouping **programmes** or **projects** relating to **base capex** as of similar type;

### base capex expenditure adjustment

means the amount calculated as specified in clause B1(1);

### base capex low incentive rate

means 15%;

### base capex programme

means a **programme** of **base capex**;

### base capex project

means a **project** of **base capex**;

### base capex proposal

means information submitted by **Transpower** to the **Commission** for the purpose of the

	<b>Commission</b> determining the things specified in clause 2.2.2(1) to (5);
<b>base capex standard incentive rate</b>	means the rate calculated in accordance with the following formula- $\left(1 - \left(1 / ((1 + x)^6)\right)\right) \times 100\%$ <p>where:  ‘x’ is the mid-point estimate of vanilla <b>WACC</b> determined in accordance with clause 3.5.1 of the Transpower Input Methodologies Determination 2010;</p>
<b>base capex threshold</b>	means \$30 million;
<b>business support</b>	means costs not directly incurred in relation to the <b>grid</b> and incurred in relation to- <ul style="list-style-type: none"> <li>(a) <b>information system and technology assets;</b></li> <li>(b) office buildings;</li> <li>(c) depots and workshops;</li> <li>(d) office furniture and equipment;</li> <li>(e) motor vehicles; or</li> <li>(f) tools, plant and machinery;</li> </ul>
	<b>C</b>
<b>calculation period</b>	means 20 year period commencing on the <b>commissioning date</b> of the last asset to be delivered by the <b>proposed investment</b> , save that where significant <b>electricity market benefit or cost elements</b> and <b>project costs</b> are expected to- <ul style="list-style-type: none"> <li>(a) cease to arise or be incurred during that period; or</li> <li>(b) arise or be incurred thereafter,</li> </ul> it means the period commencing on the <b>commissioning date</b> of the last asset delivered by the <b>proposed investment</b> and terminating on the last date that significant <b>electricity market benefit or cost elements</b> and <b>project costs</b> are expected to arise or be incurred;

<b>cap</b>	means specified <b>grid output</b> which limits the amount of positive revenue adjustment arising from the calculation of the <b>grid output adjustment</b> through the application of the <b>grid output mechanism</b> ;
<b>capital expenditure or capex</b>	means costs that- <ul style="list-style-type: none"> <li>(a) have been incurred in the acquisition or development of an asset that is, or is intended to be, <b>commissioned</b>; and</li> <li>(b) are intended to be included in the <b>value of commissioned asset</b>;</li> </ul>
<b>closing RAB value</b>	means the value calculated in accordance with clause 2.2.3(4) of the Transpower Input Methodologies Determination 2010, as modified pursuant to clause 3.3.1 of that determination;
<b>code</b>	has the same meaning as 'code' is defined in the Electricity Industry Act 2010;
<b>collar</b>	means specified <b>grid output</b> which limits the amount of negative revenue adjustment arising from the calculation of the <b>grid output adjustment</b> through the application of the <b>grid output mechanism</b> ;
<b>Commission</b>	has the same meaning as defined in s 2 of the <b>Act</b> ;
<b>commissioned</b>	has the same meaning as defined in the Transpower Input Methodologies Determination 2010;
<b>commissioning date</b>	means the date the asset is first <b>commissioned</b> ;
<b>commissioning date assumption</b>	means the assumption made as to the <b>commissioning date</b> of the last asset to be delivered by an <b>approved major capex project</b> ;
<b>committed project</b>	has the meaning specified in clause D8(1);
<b>competition effects</b>	has the meaning specified in clause D5;
<b>completion</b>	means the provision of all services forecast to be delivered by the <b>non-transmission solution</b> ;
<b>completion date</b>	means the date that a <b>non-transmission solution</b> achieves <b>completion</b> ;

<b>completion date assumption</b>	means the assumption made as to the <b>completion date</b> for a <b>non-transmission solution</b> ;
<b>consequential opex</b>	means <b>opex</b> that is incurred in connection with a <b>capex project</b> or <b>programme</b> and would not otherwise be incurred but for that <b>project</b> or <b>programme</b> ;
<b>consumer</b>	has the same meaning as specified in s 52C of the <b>Act</b> ;
<b>counterfactual case</b>	has the meaning specified in clause D3(3);
<b>CPI</b>	means- <ul style="list-style-type: none"> <li>(a) subject to paragraph (c), in respect of the December 2010 quarter and subsequent quarters, the consumer price index stipulated in the 'All Groups Index SE9A' as published by Statistics New Zealand;</li> <li>(b) subject to paragraph (c), in respect of each quarter prior to the December 2010 quarter, the same index as described in paragraph (a) multiplied by 1.02; and</li> <li>(c) in respect of quarters prior to any quarter in which the rate of <b>GST</b> 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;</li> </ul>
<b>D</b>	
<b>decommissioned asset</b>	has the meaning specified in clause D8(2);
<b>demand and generation scenario</b>	has the meaning specified in clause D3(1);
<b>demand and generation scenario variation</b>	has the meaning specified in clause D3(2);
<b>director</b>	means an individual occupying the position of director in the company, by whatever name that position is called;
<b>disclosure year</b>	means a 12-month period ending on 30 June;

*Example: 'disclosure year 2012' means 12-month period ending on 30 June 2012;*

**discount rate** has the meaning specified in clause D6(3);  
**document** has the same meaning as defined in s 2 of the **Act**;

## **E**

**E & D base capex** means **base capex** that-

- (a) is not in relation to:
  - (i) **asset replacement**;
  - (ii) **asset refurbishment**;
  - (iii) **business support**; or
  - (iv) **information system and technology assets**; and
- (b) is not funded under a **new investment contract**;

**E & D base capex project** means a **project** of **E & D base capex**;

**E & D base capex programme** means a **programme** of **E & D base capex**;

**electricity market benefit or cost element** has the meaning specified in clause D4(1);

**electricity transmission services** means electricity lines services (as 'electricity lines services' is defined in s 54C of the **Act**) supplied by **Transpower**;

**exempt major capex** means the amount of the **major capex allowance** to which the **major capex incentive rate** does not apply which may be expressed by reference to a category of expenditure within a **major capex project** or **staging project**, as determined by the **Commission** under clause 3.3.5(7);

**existing asset** has the meaning specified in clause D8(3);

**expected net electricity market benefit** has the meaning specified in clause D2(1);

## **F**

**forecast CPI** means **CPI**, unless **CPI** does not apply to the period in question, in which case it means the most recent **CPI** extended by-

- (a) in the case of a quarter for which a forecast of the annual percent change in the headline **CPI** contained in the current Monetary Policy Statement issued by the Reserve Bank of New Zealand has been made, that forecast; and
- (b) in respect of later quarters, the forecast last applying under paragraph (a) 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 (a);

**forecast FX rate**

means, in respect of each relevant currency, forecast weighted average exchange rate that **Transpower** can reasonably be expected to obtain in its foreign currency transactions for the **base capex** or **major capex** in question;

**G**

**generator**

has the same meaning as defined in the **code**;

**good electricity industry practice**

has the same meaning as specified in the **code**;

**grid**

has the same meaning as specified in the **code**;

**grid output**

means the output in respect of a particular **grid output measure**;

**grid output adjustment**

means the amount calculated as specified in clause B2;

**grid output incentive rate**

means the amount of money that **Transpower** may recover or must bear, as the case may be, per unit of the **grid output measure**, as a result of the quantum of difference between the **grid output** for a **disclosure year** and the **grid output target**, which rate will be expressed as a-

- (a) positive number where an increase in **grid output** is intended to result in an increase in revenue; and

- (b) negative number where an increase in **grid output** is intended to result in a decrease in revenue;

**grid output measure**

means a measure that quantifies the output or benefit (where 'benefit' may include reduction in risk) delivered by the **grid**, investment in the **grid**, or expenditure facilitating or enabling future investment in the **grid**;

**grid output mechanism**

means the formula by which the **grid output adjustment** is calculated, as specified in the table in clause B2(1);

**grid output target**

means the quantum of output at which the **grid output adjustment** will be nil;

**grid reliability standards**

has the same meaning as specified in Schedule 12.2 to the **code**;

**GST**

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

**I**

**ID determination**

means an information disclosure determination in relation to **Transpower** made by the **Commission** under s 52P of the **Act**;

**identified programmes**

means-

- (a) in relation to **base capex**, the **base capex projects** and **base capex programmes** forecast to be undertaken by **Transpower** during the next **regulatory period** that are selected by **Transpower** according to the categories or criteria agreed or specified under clause 2.2.1; and
- (b) in relation to **opex**, the **opex projects** and **opex programmes** forecast to be undertaken by **Transpower** during the next **regulatory period** that are selected by **Transpower** according to the categories or criteria agreed or specified under clause 2.2.1;

<b>independent</b>	means, in relation to a person engaged as a <b>verifier</b> , the person does not have a relationship with or an interest in <b>Transpower</b> that could give rise to an actual or perceived conflict of interest between the person's duties to <b>Transpower</b> and their duties to the <b>Commission</b> ;
<b>information system and technology assets</b>	means assets used in operating or supporting the operation of the <b>grid</b> , including- <ul style="list-style-type: none"> <li>(a) <b>Transpower's</b> telecommunications network;</li> <li>(b) <b>SCADA</b>; and</li> <li>(c) devices which provide data to <b>SCADA</b> and <b>grid</b> systems;</li> </ul>
<b>input methodology</b>	has the same meaning as defined in s 52C of the <b>Act</b> ;
<b>integrated transmission plan</b>	means collection of <b>documents</b> describing <b>Transpower's</b> forecast expenditure and outputs that complies with clause 7.2.1;
<b>investment need</b>	means need for <b>grid</b> investment;
<b>investment option</b>	means a technically feasible solution, including a <b>non-transmission solution</b> , designed to facilitate or meet a specific <b>investment need</b> , other than an option fully funded under a <b>new investment contract</b> ;
<b>investment test</b>	means the test specified in Schedule D Division 1;
<b>IPP</b>	means individual price-quality path;
<b>IPP determination</b>	means an individual price-quality determination applying to <b>Transpower</b> made by the <b>Commission</b> under s 52P of the <b>Act</b> ;
<b>IPP proposal</b>	means the <b>base capex proposal</b> and <b>opex proposal</b> for a <b>regulatory period</b> submitted by <b>Transpower</b> to the <b>Commission</b> for the purpose of the <b>Commission</b> making an <b>IPP determination</b> ;
<b>IPP regulatory period</b>	means, in relation to an <b>IPP proposal</b> , the <b>regulatory period</b> to which the proposal relates;
<b>ITP narrative</b>	means a high level description, that includes the information specified in clause E2;

**ITP supporting documents** means the **documents** specified in clause E3;

## L

**lifecycle replacement** means a **project** or **programme** that replaces all or substantially all of an asset and that is required because the asset is reaching the end of its normal estimated operating life (whether or not the new asset would provide a material improvement on the original service potential of the replaced asset);

**listed project** means a **project** or **programme** that is determined to be a **listed project** under clause 2.2.2(7);

**listed project application** means an application under clause 3.2.3(1) in respect of a **listed project**;

**low incentive rate base capex allowance** means the amount subject to the **base capex low incentive rate** as determined under clause 2.2.2(1)(a);

**low incentive rate base capex expenditure adjustment** means the amount calculated as specified in clause B1(3);

**low incentive rate base capex project** means a **base capex project** or **base capex programme** that is specified as a 'low incentive rate base capex project' as determined under clause 2.2.2(2)(a);

## M

**major capex** means expenditure that-

- (a) is incurred to:
  - (i) meet the **grid reliability standards**; or
  - (ii) provide a **net electricity market benefit**; and
- (b) is forecast to be-
  - (i) **capital expenditure** included in a **project** or **programme** whose aggregate forecast **capital expenditure** exceeds the **base capex threshold** (subject to clause 3.3.2(2));
  - (ii) expenditure on a **non-transmission solution**; or
  - (iii) **consequential opex**;

- (c) is not incurred in relation to any of the following things:
  - (i) **asset replacement**;
  - (ii) **asset refurbishment**;
  - (iii) **business support**; or
  - (iv) **information system and technology assets**; and
- (d) is not funded under a **new investment contract**;

<b>major capex allowance</b>	means the amount of <b>major capex</b> approved by the <b>Commission</b> in relation to an <b>approved major capex project</b> ;
<b>major capex expenditure and output adjustment</b>	means the amount calculated by the <b>Commission</b> as specified in clause B3;
<b>major capex incentive rate</b>	means 15% or an alternative rate specified by the <b>Commission</b> in respect of an <b>approved major capex project</b> ;
<b>major capex project</b>	means a <b>project of major capex</b> undertaken to address or enable a specific <b>investment need</b> to be met, which may be either or both, a <b>transmission investment</b> or <b>non-transmission solution</b> ;
<b>major capex project outputs</b>	means the <b>grid outputs</b> applying in respect of a <b>major capex project</b> or <b>staging project</b> contained in a <b>major capex proposal</b> ;
<b>major capex project (staged)</b>	means a <b>major capex project</b> consisting of two or more <b>projects</b> and includes any <b>major capex project</b> that is a continuation of an existing <b>major capex project (staged)</b> ;
<b>major capex proposal</b>	means a written application to the <b>Commission</b> for approval of a <b>major capex project</b> or one or more <b>staging projects</b> of a <b>major capex project (staged)</b> ;
<b>major capex sunk costs adjustment</b>	means the amount calculated by the <b>Commission</b> as specified under clause 3.3.7;
<b>maximum recoverable costs</b>	means: <ul style="list-style-type: none"> <li>(a) maximum amount of <b>major capex</b> which is not included in a <b>closing RAB value</b> in</li> </ul>

respect of a **non-transmission solution**;  
and

(b) **consequential opex**,

approved by the **Commission** as **recoverable costs** over the duration of the **project**;

**measure of grid performance**

means measure that quantifies the level of service received by **consumers**;

**modelled project**

has the meaning specified in clause D8(4);

## **N**

**net electricity market benefit**

has the meaning specified in clause D2(2);

**new investment contract**

has the same meaning as defined in the Transpower Input Methodologies Determination 2010;

**non-transmission solution**

means an alternative to an investment in the **grid**, which is used by **Transpower** to-

(a) avoid or defer a **transmission investment**, where the **transmission investment** would be **major capex**; or

(b) manage operational risks due to unavailability of **grid** assets during a **major capex project**;

## **O**

**operating cost**

has the same meaning as defined in the Transpower Input Methodologies Determination 2010;

**operating expenditure or opex**

has the same meaning as defined in the Transpower Input Methodologies Determination 2010;

**opex category**

means a description of a category of **opex** suitable for grouping **programmes** or **projects** relating to **opex** as of similar type;

**opex proposal**

means **Transpower's** written response to an **input methodology**, **ID determination** or a **s 53ZD notice** requiring information on proposed **operating expenditure** in respect of the **IPP** for the next **regulatory period**;

## P

<b>P30</b>	means an amount of estimated aggregate <b>project costs</b> where the probability of the actual aggregate <b>project costs</b> being lower than that amount is 30%;
<b>P50</b>	means an amount of estimated aggregate <b>project costs</b> where the probability of the actual aggregate <b>project costs</b> being lower than that amount is 50%;
<b>P70</b>	means an amount of estimated aggregate <b>project costs</b> where the probability of the actual aggregate <b>project costs</b> being lower than that amount is 70%;
<b>policies</b>	means documented and <b>director</b> or management-approved short-term and long-term procedures, processes, strategies, guidelines, plans and approaches including those relating to- <ul style="list-style-type: none"><li>(a) asset management;</li><li>(b) asset security;</li><li>(c) augmentation and planning;</li><li>(d) business cases, including cost-benefit analyses;</li><li>(e) <b>capital expenditure</b> (e.g. <b>capital expenditure</b> approval and replacement);</li><li>(f) condition monitoring and replacement;</li><li>(g) corporate governance;</li><li>(h) demand management;</li><li>(i) disaster recovery;</li><li>(j) energy supply and <b>consumer</b> growth forecasting;</li><li>(k) information technology;</li><li>(l) internal reviews;</li><li>(m) investment decision making and evaluation;</li><li>(n) land and easement acquisition;</li><li>(o) network spares;</li><li>(p) prioritisation and options analysis;</li></ul>

- (q) procurement;
- (r) project management;
- (s) regulatory compliance;
- (t) risk management and assessment;
- (u) self insurance; or
- (v) site and line safety;

**programme**

means-

- (a) 2 or more **projects**; or
- (b) 2 or more **projects** and expenditure activities,

within the same category of **capital expenditure** or **operating expenditure** that are grouped together on the basis of having a common purpose;

**project**

means temporary endeavour requiring concerted effort, which is undertaken to create defined outcomes;

**project cost**

has the meaning specified in clause D4(2) and its quantum is calculated in accordance with clause D6(1);

**proposed investment**

means the **investment option** that **Transpower** submits in a **major capex proposal** to the **Commission-**

- (a) for approval as a **major capex project**; or
- (b) as a **major capex project (staged)**, seeking approval of one or more **staging projects**;

**R**

**recovery scheme**

means specification for the systematic attribution of **maximum recoverable costs** to one or more **disclosure years**, including by way of formulae;

**recoverable cost**

has the same meaning as defined in the Transpower Input Methodologies Determination 2010;

**regulatory period**

means the period to which an **IPP determination** relates;

<b>regulatory templates</b>	<p>means tables of information requirements regarding <b>Transpower's base capex or opex</b>, whether actual or proposed, and which-</p> <p>(a) must, at least,-</p> <p style="padding-left: 40px;">(i) in relation to <b>regulatory templates</b> for <b>base capex</b>, specify <b>base capex categories</b> and require quantitative actual and forecast information in respect of those categories;</p> <p style="padding-left: 40px;">(ii) in relation to <b>regulatory templates</b> for <b>opex</b>, specify <b>opex categories</b> and require quantitative actual and forecast information in respect of those categories;</p> <p style="padding-left: 40px;">(iii) in either case, require quantitative actual and forecast information in respect of <b>identified programmes</b>; and</p> <p>(b) may contain instructions on how they must be completed;</p>
<b>relevant demand and generation scenarios</b>	has the meaning specified in clause D3(5);
<b>retained entitlement</b>	has the same meaning as defined in the Transpower Input Methodologies Determination 2010;
<b>revenue-linked grid output measure</b>	means <b>grid output measure</b> to which the <b>grid output mechanism</b> applies;
<b>right-of-use asset</b>	has the same meaning as defined in the Transpower Input Methodologies Determination 2010;
<b>S</b>	
<b>SCADA</b>	means systems for monitoring and controlling, from one location, equipment in different locations, using computing technologies;
<b>s 53ZD notice</b>	means a notice issued by the <b>Commission</b> to <b>Transpower</b> under section 53ZD of the <b>Act</b> ;
<b>sensitivity analysis</b>	has the meaning specified in clause D7;

<b>services</b>	has the same meaning as defined in s 2 of the <b>Act</b> ;
<b>staging project</b>	means a <b>project</b> within a <b>major capex project (staged)</b> ;
<b>standard incentive rate base capex allowance</b>	means the amount subject to the <b>base capex standard incentive rate</b> as determined under clause 2.2.2(1)(a) and as adjusted in accordance with the <b>base capex allowance adjustment mechanism</b> ;
<b>standard incentive rate base capex expenditure adjustment</b>	means the amount calculated as specified in clause B1(2);
<b>supply</b>	has the same meaning as defined in section 2 of the <b>Act</b> , and <b>supplied</b> must be construed accordingly;
<b>system operator</b>	has the same meaning as defined in section 5 of the Electricity Industry Act 2010;

## **T**

<b>transmission alternative</b>	means an alternative to an investment in the <b>grid</b> , which is used by <b>Transpower</b> to- <ul style="list-style-type: none"> <li>(a) avoid or defer a need for a <b>transmission investment</b> which would be <b>base capex</b>;</li> <li>(b) manage operational risks due to unavailability of <b>grid</b> assets during a <b>base capex project</b>; or</li> <li>(c) manage operational risks or network constraints due to temporary unavailability of <b>grid</b> assets;</li> </ul>
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**transmission investment** means investment in the **grid** or expenditure facilitating or enabling future investment in the **grid**;

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

## **V**

**value of commissioned asset** has the same meaning as defined in the Transpower Input Methodologies Determination 2010;

**value of expected unserved energy** means-

(a) the appropriate cost per megawatt hour specified in or under clause 4 of Schedule 12.2 to the **code**; or

(b) another appropriate cost per megawatt hour,

of expected unserved energy (as 'expected unserved energy' is defined in the **code**);

**verifier**

means an **independent** person-

(a) who has been engaged in accordance with Schedule J to verify **Transpower's IPP proposal**; or

(b) who has been engaged by a person described in paragraph (a) to carry out some or all of the verification;

**verification report**

means a report prepared by a **verifier** in accordance with a deed described in clause J5;

**W**

**WACC**

has the same meaning as defined in the Transpower Input Methodologies Determination 2010; and

**working day**

has the same meaning as defined in section 2 of the **Act**.

## PART 2 PROCESSES PRIOR TO A REGULATORY PERIOD

### SUBPART 1 Integrated transmission plan

#### 2.1.1 Integrated transmission plan

- (1) **Transpower** must submit an **integrated transmission plan** in accordance with Part 7 to the **Commission** no later than the first **working day** in the December sixteen months before the start of a **regulatory period**.
- (2) **Transpower** must publish the information submitted to the **Commission** under subclause (1) on its website.

### SUBPART 2 IPP proposal

#### 2.2.1 Required information

- (1) In the period commencing on the first **working day** in the November which is twenty-nine months before the start of a **regulatory period**, and terminating on the last **working day** in the February which is twenty-six months before the start of a **regulatory period**, the **Commission** and **Transpower** must use reasonable endeavours to agree, in respect of the **IPP proposal** for the next **regulatory period**-
  - (a) the form and content of **regulatory templates**; and
  - (b) the categories or criteria to be used to define **identified programmes**.
- (2) Where no agreement is reached on one or more of the matters specified in subclause (1), the **Commission** must, having regard to the views **Transpower** expressed during the period referred to in subclause (1), specify those matters and notify **Transpower** thereof by the last **working day** in the March which is twenty-five months before the start of a **regulatory period**.
- (3) **Transpower** must submit an **IPP proposal** prepared in accordance with Part 7 to the **Commission** no later than the first **working day** in the December which is sixteen months before the start of a **regulatory period**.

#### 2.2.2 Commission evaluation and decisions

- (1) No later than the last **working day** in the August which is eight months before the start of a **regulatory period**, the **Commission** will determine in respect of that **regulatory period**, for the purposes of making an **IPP determination**-
  - (a) a **standard incentive rate base capex allowance** and, if applicable, a **low incentive rate base capex allowance** for each **disclosure year** of the **regulatory period**;

- (b) in accordance with clauses A5 and A6, the following as **revenue-linked grid output measures**-
    - (i) one or more **asset performance measures**;
    - (ii) one or more **measures of grid performance**;
    - (iii) if **Transpower** requests, one or more **asset capability grid output measures**; and
    - (iv) at **Transpower's** request, any other **grid output measure**;
  - (c) one or more **asset health grid output measures** which may be either **revenue-linked grid output measures** in accordance with clauses A5 and A6, or **grid output measure(s)** that are not linked to revenue in accordance with clause A5;
  - (d) in accordance with clause A7, in respect of each **revenue-linked grid output measure**, a-
    - (i) **cap**;
    - (ii) **collar**;
    - (iii) **grid output incentive rate**; and
    - (iv) **grid output target**.
- (2) When determining the **base capex allowances** in subclause (1)(a), the **Commission** will also specify the-
  - (a) **low incentive rate base capex projects** if it determines a **low incentive rate base capex allowance**;
  - (b) **forecast CPI** used to determine the **base capex allowances**;
  - (c) **forecast FX rates** used to determine the **base capex allowances**; and
  - (d) amount or percentage of the **base capex allowances** to which the **forecast FX rates** may apply.
- (3) A **base capex project** or **base capex programme** may be specified as a **low incentive rate base capex project** by the **Commission** if it considers that it will require **capital expenditure** greater than the **base capex threshold**.
- (4) When determining the **revenue-linked grid output measures** in subclause (1)(b), the **Commission** may also determine in accordance with clause A5A5 one or more of the same types of **grid output measures** that are not linked to revenue.
- (5) When determining the **standard incentive rate base capex allowance** the **Commission** may specify a **base capex allowance adjustment mechanism**.
- (6) The **Commission** will only make the determinations specified in subclauses (1) to (5) after-
  - (a) consulting in any manner specified in clause 8.1.1; and

- (b) evaluating in accordance with Part 6-
    - (i) the **base capex proposal**; and
    - (ii) any further information received pursuant to subclause (9).
- (7) At the same time as determining the matters in subclause (1), the **Commission** may also determine in respect of the **regulatory period**, for purposes of making an **IPP determination**, any **projects** or **programmes** that are to be **listed projects**.
- (8) The **Commission** may determine a **project** or **programme** to be a **listed project** in accordance with subclause (7) if:
  - (a) the **Commission** considers the **project** or **programme**:
    - (i) will require **capital expenditure** greater than the **base capex threshold**;
    - (ii) is reasonably required by **Transpower**; and
    - (iii) has at least one asset, or one component of an asset, that is likely to have a **commissioning date** in the **regulatory period**;
  - (b) **capital expenditure** for the **project** or **programme** is forecast to be incurred in relation to:
    - (i) **asset replacement, asset refurbishment**, or both;
    - (ii) work that–
      - (A) is primarily driven by **Transpower’s policies** for replacing conductors or cables on a transmission line;
      - (B) improves the original service potential of the transmission line; and
      - (C) that is required due to the condition or performance of the conductors or cables; or
    - (iii) a **lifecycle replacement** of an existing **information system and technology asset** for which it is unreasonable to expect **Transpower** to accurately forecast the **capex** at the time the **IPP proposal** is submitted;
  - (c) the **project** or **programme** is anticipated to commence within the **regulatory period** but the commencement date, scope, or cost of the **project** or **programme** cannot be forecast with specificity; and
  - (d) the **project** or **programme** is not already accommodated in the **base capex allowances** for the **regulatory period**.
- (9) Where the **Commission** considers that, for the purpose of deciding any matter specified in this clause, it requires further information from **Transpower**, the **Commission** will request **Transpower** to provide such information by a reasonable future date.

- (10) The **Commission** will publish its decisions under this clause as soon as reasonably practicable after they have been made.

## PART 3 PROCESSES DURING A REGULATORY PERIOD

### SUBPART 1 Integrated transmission plan

#### 3.1.1 Integrated transmission plan

- (1) Subject to subclause (2), **Transpower** must, by the last **working day** of September of each **disclosure year**, submit to the **Commission**-
  - (a) **ITP supporting documents**; and
  - (b) an updated **ITP narrative** that takes account of-
    - (i) any material changes to matters covered in the **ITP narrative** most recently submitted to the **Commission**; and
    - (ii) the content of the **ITP supporting documents**.
- (2) Subclause (1) does not apply in respect of the second last and last **disclosure years** commencing in a **regulatory period**.
- (3) **Transpower** must publish a copy of the information submitted to the **Commission** under subclause (1) on its website.

### SUBPART 2 Base capex

#### 3.2.1 Base capex projects or programmes with forecast cost that exceeds the base capex threshold

In respect of a **base capex project** or **base capex programme** involving forecast **capital expenditure** that exceeds the **base capex threshold**, **Transpower** must, prior to undertaking the **project** or **programme**, undertake-

- (a) a cost-benefit analysis consistent with determining **expected net electricity market benefit**; and
  - (b) consultation with interested persons in accordance with clause 8.1.2.
- #### 3.2.2 Base capex annual adjustments
- (1) By the end of the month following the month in which **Transpower** provides its **annual compliance statement** to the **Commission** for a **disclosure year**, subject to subclauses (2) and (3), the **Commission** will calculate for that **disclosure year** a-
    - (a) **base capex expenditure adjustment**; and
    - (b) **grid output adjustment**.
  - (2) Where the **Commission** considers that it requires further information for the purpose of calculating the adjustments in subclause (1), it will request **Transpower** to provide such information by a reasonable future date.

- (3) The **Commission** will not calculate the adjustments in subclause (1) until after having evaluated relevant information disclosed pursuant to:
- (a) a request made pursuant to subclause (2);
  - (b) an **ID determination**; or
  - (c) a **s 53ZD notice**.
- (4) The **Commission** will publish its decision under this clause as soon as reasonably practicable.

### 3.2.3 Approval of base capex for listed project in addition to the base capex allowances

- (1) **Transpower** may submit, no later than the last **working day** in the June twenty-two months before the end of a **regulatory period**, a **listed project application** for approval of additional **base capex**, where expenditure is to be incurred after the date of application on assets or components of assets that are forecast to be **commissioned** within that **regulatory period** in respect of a **listed project**.
- (2) A **listed project application** must include:
- (a) a description of the reasons for carrying out the **listed project**, supported by relevant technical information, including evidence of the current and future need for the applicable assets or components of assets by reference to the **relevant demand and generation scenarios**;
  - (b) consideration of alternative options for carrying out the **listed project**, including non-replacement and demolition, enhancement or development of alternative assets, and **transmission alternatives**;
  - (c) intended scope of the **listed project**, including specification of the **grid outputs** or other outputs that apply in respect of the **listed project**;
  - (d) all relevant technical and costing information used to estimate both the cost of the **listed project** and alternative options, including details on risk allowances and contingencies;
  - (e) estimated cost of the **listed project** broken down into year by year figures in expected **disclosure year** of expenditure, and the assumptions used to derive the estimated cost;
  - (f) a cost-benefit analysis in accordance with clause 3.2.1(a), including a **sensitivity analysis** and reasons for selecting the variables of the **sensitivity analysis**;
  - (g) if **Transpower** requests the **base capex low incentive rate** to apply to the additional **base capex**, information demonstrating that the **listed project** is still expected to require **capital expenditure** greater than the **base capex threshold** and information on the extent to which the factors set out in clause A4 are applicable;

- (h) evidence of consultation with interested persons in accordance with clause 3.2.1(b);
  - (i) evidence that its Board of Directors has approved the **listed project** as a **project** or **programme** and details of the quality assurance processes followed in respect of the Board's approval of the **listed project**; and
  - (j) certification of the application in accordance with clause 9.1.2.
- (3) Where the **Commission** considers that, for the purpose of deciding whether to approve **base capex** in respect of a **listed project** it requires further information than that provided in the **listed project application**, the **Commission** will request **Transpower** to provide such information by a reasonable future date.
- (4) The **Commission** may in addition to the **base capex allowances**, at its discretion, determine an approved amount of **base capex** in respect of a **listed project** for **disclosure years** in a **regulatory period**, following evaluation of the **listed project application**, in accordance with:
- (a) the consultation requirements in clause 8.1.1; and
  - (b) Part 6.
- (5) In any decision to approve additional **base capex** in respect of a **listed project**, the **Commission** will-
- (a) apply the **forecast CPI** used to determine the **base capex allowances** for that **regulatory period** to the approved additional **base capex** for the **listed project**;
  - (b) apply the **forecast FX rates** used to determine the **base capex allowances** for that **regulatory period** to the approved additional **base capex** for the **listed project**;
  - (c) specify the amount or percentage of the additional **base capex** for the **listed project** to which the **forecast FX rates** may apply;
  - (d) determine whether the **base capex standard incentive rate** or **base capex low incentive rate** applies to the additional **base capex**.
- (6) The **Commission** will publish its decision on the application as soon as reasonably practicable.

### SUBPART 3 **Major capex projects**

#### 3.3.1 Notification of proposed investments

- (1) **Transpower** must notify the **Commission** of its intention to plan a **major capex project** that may become a **proposed investment**.
- (2) **Transpower's** notification under subclause (1) must include the following detail about the **major capex project** if it is planned to be a **major capex project (staged)**-

- (a) all the proposed **staging projects** being planned; and
  - (b) if it is a continuation of an existing **major capex project (staged)**, all related previously approved **staging projects** and whether those **staging projects** have been completed.
- (3) The **Commission** and **Transpower** must, in the two-month period following a notification, under subclause (1) use reasonable endeavours to agree in respect of that **major capex project**-
  - (a) a consultation programme for a **transmission investment** or **non-transmission solution**, in accordance with clause 8.1.3;
  - (b) an approach to ensure appropriate consideration of **non-transmission solutions** to meet the **investment need** giving rise to the **major capex project** in accordance with clause 8.1.3;
  - (c) an **application submission date**; and
  - (d) an **approval timeframe**.
- (4) Where the **Commission** and **Transpower** have not agreed on each of the matters in subclause (3) within the two month period following a notification under subclause (1), the **Commission** must, after considering the views expressed by **Transpower**, specify those matters that have not been agreed within two weeks of the expiry of the two month period.
- (5) The consultation programme referred to in subclause (3)(a) may also include any consultation processes that the **Commission** intends to follow.
- (6) The **Commission** and **Transpower** must publish the matters agreed under subclause (3) or specified under subclause (4) as soon as reasonably practicable.
- (7) The **Commission** and **Transpower** must regularly review whether the matters published under subclause (6) (or published in amended form under subclause (8)) remain appropriate and reasonable and the **Commission** may, after considering **Transpower's** views, amend any of those matters to ensure that they remain appropriate and reasonable.
- (8) Where the **Commission** materially amends any of the matters under subclause (7), the **Commission** and **Transpower** must publish the amended matters or a summary of them as soon as reasonably practicable.
- (9) **Transpower** must consult interested persons in accordance with the published consultation programme and follow the published approach for consideration of **non-transmission solutions**.

### 3.3.2 Capital expenditure that can be recovered

- (1) **Major capex projects** that are not **major capex projects (staged)** must be approved by the **Commission** before **Transpower** can recover any **capital expenditure** relating to such **major capex projects**.

- (2) Where a **major capex project** is a **major capex project (staged)**, Transpower may only recover **capital expenditure** relating to approved **staging projects** of that **major capex project**.

### 3.3.3 Major capex proposals

- (1) **Transpower** must submit a **major capex proposal** to the **Commission** when it seeks approval for-

- (a) a **major capex project** that is not **major capex projects (staged)**; or
- (b) one or more **staging projects** of a **major capex projects (staged)**.

For the avoidance of doubt, any application by **Transpower** to the **Commission** for approval of subsequent stages of a **major capex project (staged)** must be made in a **major capex proposal** separate from a proposal submitted for a previously approved stage.

- (2) Where **Transpower** seeks approval of one or more **staging projects**-
- (a) the aggregate forecast **capital expenditure** and forecast **maximum recoverable costs** for all **staging projects** that comprise the **major capex project (staged)** must exceed the **base capex threshold**;
  - (b) the forecast **capital expenditure** and forecast **maximum recoverable costs** for a **staging project** for which approval is sought need not exceed the **base capex threshold**.
- (3) A **major capex proposal** may be submitted at any time during a **regulatory period**.

### 3.3.3A Amendment of major capex proposals

- (1) After **Transpower** has submitted a **major capex proposal** to the **Commission** for approval, **Transpower** may amend the proposal only in accordance with this clause.
- (2) **Transpower** may amend the proposal by-
  - (a) withdrawing 1 or more of the **major capex project outputs** included in the proposal as submitted; or
  - (b) changing 1 or more of the **major capex project outputs** included in the proposal as submitted.
- (3) The **Commission** may propose to **Transpower** that **Transpower** amend the proposal by withdrawing 1 or more **major capex project outputs** but the **Commission** may not propose changing 1 or more **major capex project outputs**.
- (4) **Transpower** may not amend a **major capex proposal** to include an **investment option** that **Transpower** has not previously consulted on before submitting the **major capex proposal** under clauses 8.1.3 and I2.
- (5) **Transpower** must-
  - (a) notify the **Commission** of its intention to amend the **major capex proposal** as soon as is practicable;
  - (b) comply with the requirements in clause 7.4.1A; and
  - (c) submit the amended **major capex proposal** before the **Commission** publishes a draft decision on the proposal.
- (6) After **Transpower** has notified the **Commission** under subclause (5)(a), the **Commission** and **Transpower** must use reasonable endeavours to agree within a reasonable time, in respect of the proposed amendment, the matters described in clause 3.3.1(3)(a) to (d).
- (7) Clauses 3.3.1(4) to (9) apply in respect of the proposed amendment,-
  - (a) as if the proposed amendment were a **major capex proposal**;
  - (b) taking into account any matters already agreed or specified under clause 3.3.1(3) or (4) in respect of the **major capex proposal** to which the proposed amendment relates; and
  - (c) subject to any other necessary modifications.
- (8) If **Transpower** submits an amended **major capex proposal** under this clause, all relevant **input methodologies** apply to the amended **major capex proposal** as if it were the original proposal.

#### 3.3.4 Commission rejection of a major capex proposal

The **Commission** may reject a **major capex proposal** where-

- (a) **Transpower** has not complied with the requirements specified in clause 3.3.1; or
- (b) the **major capex proposal** does not comply with clause 7.4.1.

#### 3.3.5 Commission decisions on a major capex project or staging projects

- (1) If the **Commission** does not reject the **major capex proposal** under clause 3.3.4, it must approve, decline, or approve only some **major capex project outputs** of,-
  - (a) one or more **staging projects**, if the **major capex project** is a **major capex project (staged)**; or
  - (b) the **major capex project**.
- (1A) A decision to approve only some **major capex project outputs** of a **major capex project** or **staging project** has the effect of declining the remainder of the **major capex proposal**.
- (2) For the avoidance of doubt, where **Transpower** has sought approval for a **major capex project**, the **Commission** may approve such **project** as a **major capex project** even where the **major capex allowance** it determines is below the **base capex threshold**.
- (3) When evaluating a new **major capex proposal** seeking approval for a **staging project** that is a continuation of an existing **major capex project (staged)**, the **Commission** may have regard to the information in the previous **major capex proposal** relating to the **major capex project (staged)**.
- (4) Where the **Commission** considers that it requires further information to decide whether to approve or decline a **major capex project** or **staging project**, it will request **Transpower** to provide such information by a reasonable future date.
- (5) The **Commission** may only decide to approve or decline a **major capex project** or **staging project** after-
  - (a) consulting in the manner specified in clause 8.1.1; and
  - (b) having evaluated, in accordance with Part 6 and subject to subclauses (3) and (5A)-
    - (i) the **major capex proposal**; and
    - (ii) any further information received pursuant to subclause (4).
- (5A) For the purposes of a decision to approve part of a **major capex project** or **staging project** in accordance with subclause (1), the **Commission** must evaluate that part of the **project** as if it were the complete **major capex project** or **staging project** for which **Transpower** has sought approval.
- (5B) Where the **Commission** approves part of a **major capex project** or **staging project** in accordance with subclause (1), that approved part of the **project** must be treated for the

purposes of this determination, including this clause, as the **major capex project** or **staging project**.

- (6) Where the **Commission** approves a **major capex project** or **staging project** the-
- (a) **maximum recoverable costs;**
  - (b) **recovery scheme;**
  - (c) **major capex project outputs;**
  - (d) **approval expiry date;**
  - (e) **commissioning date assumption; and**
  - (f) **completion date assumption,**

will be those specified by **Transpower** for the **major capex project** or **staging project** adjusted, in the case of a decision by the **Commission** to approve part of the **project** in accordance with subclause (1), to the extent necessary to reflect that approved part of the **project**.

- (7) Where the **Commission** approves a **major capex project** or **staging project** the-
- (a) **major capex allowance;**
  - (b) **major capex incentive rate; and**
  - (c) **exempt major capex,**

will be those determined by the **Commission** for the **major capex project** or **staging project** adjusted, in the case of a decision by the **Commission** to approve part of the **project** in accordance with subclause (1), to the extent necessary to reflect that approved part of the **project**.

- (8) The **Commission** will publish its decisions as soon as reasonably practicable after they have been made.

### 3.3.6 Amendments to approved major capex projects

- (1) The **Commission** may, on **Transpower's** application, amend one or more of the following matters previously approved under clause 3.3.5-
- (a) **maximum recoverable costs;**
  - (b) **recovery scheme;**
  - (c) **approved major capex project outputs; and**
  - (d) **approval expiry date.**
- (2) Where **Transpower** makes an application under subclause (1)-
- (a) **Transpower** must comply with the requirements in clause 7.4.2;

- (b) the **Commission** and **Transpower** must use reasonable endeavours to agree an **approval timeframe** in respect of the application within two weeks from the date of receipt of the application; and
  - (c) where the **Commission** and **Transpower** have not agreed an **approval timeframe** within the two weeks period, the **Commission** must, after considering **Transpower's** views and having regard to its obligations in subclauses (3) to (5), specify the **approval timeframes** within two weeks of the expiry of the two week period.
- (3) The **Commission** must make reasonable efforts to determine any amendments within the following timeframes-
  - (a) for amendments to an **approval expiry date**, by the **approval expiry date** previously approved; and
  - (b) for amendments to any other matter specified in subclause (1), by the end of the second month after the month in which **Transpower** provides its **annual compliance statement** to the **Commission** for the **disclosure year** in which the **commissioning date** or **completion date** occurs.
- (4) Where the **Commission** considers that it requires further information to decide whether to make an amendment, it will request **Transpower** to provide such information by a reasonable future date.
- (5) The **Commission** may not make an amendment until it has evaluated, in accordance with Part 6-
  - (a) the application received from **Transpower** under subclause (1); and
  - (b) any information received pursuant to subclause (4).
- (6) Where an amendment is made by the **Commission** the amended-
  - (a) **maximum recoverable costs**; and
  - (b) **recovery scheme**;will be those specified by the **Commission** in its decision making the amendment.
- (7) Where an amendment is made by the **Commission** the amended-
  - (a) **major capex project outputs**; and
  - (b) **approval expiry date**,will be those proposed by **Transpower** in its amendment application.

- (8) Where the **Commission** makes an amendment to the **major capex project outputs**, the **Commission** may, at its discretion, make commensurate amendments to the **major capex allowance** and **exempt major capex**.
- (9) Where the **Commission** makes any amendment, the **Commission** may also make amendments to the-
  - (a) **commissioning date assumption**; and
  - (b) **completion date assumption**.
- (10) The **Commission** will publish its decisions as soon as reasonably practicable after they have been made.

### 3.3.7 Major capex sunk costs adjustment

- (1) The **Commission** may, at its discretion, on **Transpower's** application, calculate a **major capex sunk costs adjustment** where **Transpower** has incurred **capital expenditure** in relation to an **approved major capex project**, but prior to the **commissioning date** or **completion date** of the **approved major capex project**-
  - (a) **Transpower** has decided not to proceed with the **approved major capex project**; or
  - (b) a relevant **approval expiry date** has passed.
- (2) Where **Transpower** makes an application it must comply with the requirements in clause 7.4.3.
- (3) The **major capex sunk costs adjustment** is equal to the amount of the **major capex** incurred by **Transpower** in respect of the **approved major capex project** in question which, having regard to the factors listed in clause 6.1.1(6), the **Commission** considers should reasonably be recovered by **Transpower** under an **IPP determination**.
- (4) Where the **Commission** considers that it requires further information to decide whether to calculate a **major capex sunk costs adjustment**, it will request **Transpower** to provide such information by a reasonable future date.
- (5) The **Commission** may not decide whether to calculate a **major capex sunk costs adjustment** until it has evaluated, in accordance with Part 6-
  - (a) the application; and
  - (b) any information received pursuant to subclause (4).
- (6) Where the **Commission** calculates a **major capex sunk costs adjustment** in respect of an **approved major capex project** any approval of the **major capex project** or **staging project**, as applicable, is deemed to be revoked.
- (7) The **Commission** will publish its decision as soon as reasonably practicable.

### 3.3.8 Decision on approved major capex project outputs after commissioning or completion

- (1) The **Commission** will decide, by the end of the month following the month in which **Transpower** provides its **annual compliance statement** to the **Commission** for a **disclosure year**, whether the **approved major capex project outputs** were met in respect of each **approved major capex project** having a **commissioning date** or **completion date** in that **disclosure year**.
- (2) The **Commission** may not decide whether the **approved major capex project outputs** were met until it has evaluated, to the extent relevant to the decision-
  - (a) the information disclosed by **Transpower** in respect of the last completed **disclosure year** pursuant to either or both of-
    - (i) an **ID determination**; or
    - (ii) a **s 53ZD notice**; and
  - (b) any information received pursuant to subclause (3).
- (3) Where the **Commission** considers that it requires further information to decide whether **approved major capex project outputs** were met, it will request **Transpower** to provide such information by a reasonable future date.
- (4) The **Commission** will publish its decisions as soon as reasonably practicable.

### 3.3.9 Major capex expenditure and output adjustment

- (1) If an **approved major capex project** is a-
  - (a) **transmission investment**, and the last asset delivered by the **project** has a **commissioning date** in a **disclosure year**; or
  - (b) **non-transmission solution**, and it has a **completion date** in a **disclosure year**,

then the **Commission** will calculate, by the end of the month following the month in which **Transpower** provides its **annual compliance statement** to the **Commission** for the **disclosure year**, the amount of the **major capex expenditure and output adjustment** in respect of that **approved major capex project**.

- (2) The **Commission** will not calculate the adjustment until after having considered-
  - (a) the information relevant to the calculations disclosed by **Transpower** in respect of the last completed **disclosure year** pursuant to either or both of-
    - (i) an **ID determination**; or
    - (ii) a **s 53ZD notice**;
  - (b) any decisions under clause 3.3.6 relevant to the calculations;
  - (c) any decisions under clause 3.3.8, and
  - (d) any information received pursuant to subclause (3).

- (3) Where the **Commission** considers that, for the purpose of making any of the calculations referred to in subclause (1), it requires further information than that referred to in subclauses (2)(a), (b) and (c) the **Commission** will request **Transpower** to provide such information by a reasonable future date.
- (4) The **Commission** will publish its decisions as soon as reasonably practicable after they have been made.

## **PART 4 [DELETED]**

## **PART 5 CONSEQUENCES OF COMMISSION NOT COMPLYING WITH TIMEFRAMES**

### 5.1.1 Consequences of timeframes not being met by Commission

- (1) None of the **Commission's** functions or decisions described in this determination are invalidated on account of any **Commission** failure to meet-
  - (a) timeframes applying to the **Commission** specified in this determination; or
  - (b) **approval timeframes**.
- (2) Notwithstanding subclause (1), the **Commission** will, as soon as reasonably practicable after it believes that a timeframe applying to the **Commission**-
  - (a) is not likely to be met; or
  - (b) has not been adhered to,notify **Transpower** and, where relevant, interested persons, of the new timeframe that applies.

## **PART 6 COMMISSION EVALUATION OF MATTERS RELATING TO CAPITAL EXPENDITURE**

### **6.1.1 Evaluation criteria**

- (1) In evaluating anything pursuant to this Part, the **Commission** may-
  - (a) take into account-
    - (i) the views of any person the **Commission** has consulted pursuant to clause 8.1.1; and
    - (ii) any other information it considers relevant; and
  - (b) engage any appropriately qualified person to assist the **Commission** with its evaluation.
- (2) The **Commission** will apply the following criteria in evaluating **base capex proposals, listed project applications, major capex proposals** and applications under clause 3.3.6:
  - (a) whether what is proposed is consistent with the **input methodology** in this determination and, where relevant, the Transpower Input Methodologies Determination 2010;
  - (b) the extent to which what is proposed will promote the purpose of Part 4 of the **Act**; and
  - (c) whether, the data, analysis, and assumptions underpinning what is proposed are fit for the purpose of the **Commission** exercising its powers under Part 4 of the **Act**, including consideration as to the accuracy and reliability of data and the reasonableness of assumptions and other matters of judgement.
- (3) The **Commission** will also evaluate a **base capex proposal** in accordance with Schedule A.
- (3A) The **Commission** will also evaluate a **listed project application** in accordance with clause A2 (and, for that purpose, clause A2 applies as if the **listed project** were an **identified programme**).
- (4) The **Commission** will also evaluate a **major capex proposal** in accordance with Schedule C.
- (5) The **Commission** will also evaluate an application under clause 3.3.6 in accordance with the following criteria:
  - (a) the extent to which each key factor relevant to the proposed amendment-
    - (i) was reasonably foreseeable by **Transpower** before the **major capex project** was approved by **Commission**; and
    - (ii) was or is within **Transpower's** control;
  - (b) in relation to each key factor outside **Transpower's** control-

- (i) the reasonableness of any applicable mitigation strategy devised by **Transpower**; and
    - (ii) the reasonableness and extent of mitigation actions taken by **Transpower**;
  - (c) the extent to which the **major capex project's expected net electricity market benefit** would be materially lower as a result of the amendment than when it was approved; and
  - (d) in respect of a **major capex project** that has already commenced, the extent to which **Transpower** has incurred **capital expenditure** by the date of the application.
- (6) The **Commission** will also evaluate an application under clause 3.3.7 relating to the calculation of a **major capex sunk costs adjustment** in accordance with the following criteria:
- (a) the reasons and key factors that resulted in **Transpower** applying for the **major capex sunk costs adjustment**;
  - (b) in relation to each such key factor, whether it-
    - (i) was reasonably foreseeable by **Transpower** before the **major capex project** was approved by the **Commission**; and
    - (ii) was or is within **Transpower's** control;
  - (c) in relation to each key factor outside **Transpower's** control, the-
    - (i) reasonableness of any applicable mitigation strategy devised by **Transpower**; and
    - (ii) reasonableness and extent of mitigation actions taken by **Transpower**;
  - (d) the reasonableness of the progress of the **major capex project**, including details of-
    - (i) planning processes undertaken;
    - (ii) resource management consents, other regulatory consents, and property rights and access rights obtained;
    - (iii) construction and labour contracts and arrangements made;
    - (iv) construction completed;
    - (v) testing undertaken; and
    - (vi) **approved major capex project outputs** delivered; and
  - (e) the reasonableness of the **major capex** incurred and the extent of the forecast **major capex** yet to be incurred.

## **PART 7 INFORMATION REQUIREMENTS APPLYING TO TRANSPOWER**

### **SUBPART 1 General information requirements**

#### **7.1.1 Format of information**

- (1) This clause applies to all information provided by **Transpower** pursuant to this Part.
- (2) All significant financial and numerical data must be provided in an electronic Microsoft Excel file capable of a 'copy and paste' function being applied to it.
- (3) All other information must be provided in an electronic Microsoft Word, Microsoft Excel or Adobe PDF file capable of a 'copy and paste' function being applied to it.
- (4) Information provided must be accompanied by an index that-
  - (a) specifies the reference in this determination to the relevant information requirement;
  - (b) succinctly describes each relevant information requirement; and
  - (c) provides a reference to the place or places in the submitted **document** or collection of **documents** where a response to each relevant information requirement is provided.
- (5) Where data is provided on or derived from a spreadsheet, and has been computed or derived from other values in the spreadsheet through the use of formulae, all underlying formulae must be accessible or provided, as the case may be.

#### **7.1.2 Information claimed to be confidential**

- (1) Where **Transpower** considers that it has a right to confidentiality in any information it provides the **Commission** pursuant to this Part and it does not waive that right, it must-
  - (a) include that information in an appendix; and
  - (b) clearly mark it as confidential.
- (2) For the avoidance of doubt-
  - (a) nothing in subclause (1) prevents the **Commission** publishing such information in respect of which it considers **Transpower** has no right to confidentiality; and
  - (b) nothing in paragraph (a) affects **Transpower's** rights or remedies for breach of any right to confidentiality.

### 7.1.3 Omission of required information

Where **Transpower** provides the **Commission** with any **document** under this determination that omits any required information, the **Commission** may treat that **document** as compliant with the requirement in question where that **document** contains a reasonable explanation for its omission.

## SUBPART 2 **Integrated transmission plan**

### 7.2.1 Integrated transmission plans

An **integrated transmission plan** must contain the information specified in clause E1.

## SUBPART 3 **Base capex**

### 7.3.1 Base capex proposals

- (1) A **base capex proposal** must-
  - (a) contain completed-
    - (i) **regulatory templates** agreed pursuant to clause 2.2.1(1)(a); or
    - (ii) **regulatory templates** specified pursuant to clause 2.2.1(2);
  - (b) comply with Schedule F; and
  - (c) contain the certificates specified in clause 9.1.1.
- (2) For the purpose of subclause (1)(a), the **regulatory templates** must specify **base capex categories**.
- (3) A requirement of Schedule F may be met by **Transpower** by providing a reference to information published in another **document**, such as the **documents** specified in clauses E3(a) or E3(b), provided that-
  - (a) the reference clearly and succinctly provides the required information, without the need for additional analysis, explanation or interpretation; and
  - (b) in respect of each **document** relied upon, an index is provided stating the-
    - (i) reference to the relevant requirement or requirements of Schedule F; and
    - (ii) precise reference or references within the **document** relied upon.
- (4) For the avoidance of doubt, one physical **document** may contain more than one of the certifications specified in clause 9.1.1.

## SUBPART 3A **Opex**

### 7.3.2 Opex proposals

- (1) An **opex proposal** must-

- (a) contain completed-
    - (i) **regulatory templates** agreed pursuant to clause 2.2.1(1)(a); or
    - (ii) **regulatory templates** specified pursuant to clause 2.2.1(2);
  - (b) comply with Schedule FA; and
  - (c) contain the certificates specified in clause 9.1.3.
- (2) For the purposes of subclause (1)(a), the **regulatory templates** must specify **opex categories**.
- (3) A requirement of Schedule FA may be met by **Transpower** by providing a reference to information published in another **document**, such as the **documents** specified in clause E3(a) or E3(b), provided that-
  - (a) the reference clearly and succinctly provides the required information, without the need for additional analysis, explanation, or interpretation; and
  - (b) in respect of each **document** relied upon, an index is provided stating the-
    - (i) reference to the relevant requirement or requirements of Schedule FA; and
    - (ii) precise reference or references within the **document** relied upon.
- (4) For the avoidance of doubt, one physical **document** may contain more than one of the certifications specified in clause 9.1.3.

## SUBPART 4 **Major capex**

### 7.4.1 Major capex proposals

- (1) A **major capex proposal** must-
  - (a) comply with Schedule G; and
  - (b) contain the certificates specified in clause 9.2.1.
- (2) The number of **investment options** contained in a **major capex proposal** must be appropriate given the magnitude of the estimated expenditure and the complexity of the **investment need** associated with the **proposed investment**.
- (3) With respect to each **investment option** described in such a proposal, the-
  - (a) specificity of information; and
  - (b) rigour and comprehensiveness of the analysis,must be commensurate with the estimated expenditure and complexity of that option.
- (4) For the avoidance of doubt, one physical **document** may contain more than one of the certifications specified in clause 9.2.1.

### 7.4.1A Amendment of major capex proposals

- (1) An amendment of a **major capex proposal**, in accordance with clause 3.3.3A, must-
  - (a) identify the aspects of the proposal that are amended;
  - (b) contain the information specified in Schedule I, Division 2A; and
  - (c) contain the certificate specified in clause 9.2.1.
- (2) The **investment options** contained in the **major capex proposal** as amended must be appropriate given the magnitude of the estimated expenditure and the complexity of the **investment need** associated with the proposed investment.
- (3) With respect to each amended **investment option** described in the proposal as amended, the-
  - (a) specificity of information; and
  - (b) rigour and comprehensiveness of the analysis,must be commensurate with the estimated expenditure and complexity of that option.
- (4) For the avoidance of doubt, one physical **document** may contain more than one of the certificates specified in clause 9.2.1.

#### 7.4.2 Amendment applications for approved major capex projects

- (1) An application under clause 3.3.6(1)(a) to 3.3.6(1)(c) must be received by the **Commission** by the date on which **Transpower** provides its **annual compliance statement** to the **Commission** for the **disclosure year** in which the **commissioning date** or **completion date** of the **approved major capex project** in question occurs.
- (2) An application under clause 3.3.6(1)(d) must be received by the **Commission** no later than 6 weeks before the **approval expiry date**.
- (3) An application under-
  - (a) clause 3.3.6(1)(a) and 3.3.6(1)(b) must contain the information specified in Schedule H Division 1;
  - (b) clause 3.3.6(1)(c) must contain the information specified in Schedule H Division 2; and
  - (c) clause 3.3.6(1)(d) must contain the information specified in Schedule H Division 3.
- (4) An application under clause 3.3.6 must contain the certificates specified in clause 9.3.1.
- (5) For the avoidance of doubt, one physical **document** may contain more than one of the certifications specified in clause 9.3.1.

#### 7.4.3 Sunk costs applications

- (1) Subject to subclause (2)(2), an application under clause 3.3.7 must-
  - (a) be received by the **Commission** no later than 6 weeks after the **approval expiry date**;

- (b) contain the information specified in Schedule H Division 4; and
  - (c) contain the certificates specified in clause 9.3.1.
- (2) For the avoidance of doubt, one physical **document** may contain more than one of the certifications specified in clause 9.3.1.
- (3) For the purpose of subclause (1), the **Commission**, at the request of **Transpower**, may extend the relevant timeframe for making an application where the **Commission** is satisfied that not all of the information relevant for its evaluation of an application is, or will be, available within the timeframe specified in subclause (1).

## **SUBPART 5 Expected benefits and impact of proposed expenditure on transmission charges**

### **7.5.1 Explanation of the expected benefits of proposed expenditure and its impact on transmission charges**

- (1) All **major capex proposals** and **listed project applications** must include-
  - (a) a description of the benefits the proposed expenditure is expected to deliver to **Transpower's** customers;
  - (b) to the extent reasonably possible, a quantitative estimate of the benefits the proposed expenditure is expected to deliver to **Transpower's** customers; and
  - (c) an estimate of the expected increase in **Transpower's** transmission charges due to the proposed expenditure, including estimated increases in transmission charges-
    - (i) per kilowatt hours of energy supplied; and
    - (ii) for each affected grid exit point and grid injection point.
- (2) When **Transpower** submits an **IPP proposal** for a **regulatory period** to the **Commission** for the purpose of the **Commission** making an **IPP determination**, **Transpower** must submit to the **Commission**-
  - (a) a description of the benefits the proposed expenditure is expected to deliver to **Transpower's** customers;
  - (b) an estimate of expected transmission charges allocated to each grid exit point and grid injection point based on the forecast transmission revenue for each year of the next **regulatory period**, being a year ending on 31 March; and
  - (c) an estimate of expected changes in **Transpower's** transmission charges allocated to each grid exit point and grid injection point based on the forecast transmission revenue for the final year of the current **regulatory**

**period** and for each year of the next **regulatory period**, being a year ending on 31 March; and

- (d) to the extent reasonably possible, for each year of the next **regulatory period**, being a year ending on 31 March, an estimated change of transmission charges per kilowatt hours of energy supplied.

## SUBPART 6 **Verification of IPP proposals**

### 7.6.1 Verification of IPP proposals

When **Transpower** submits an **IPP proposal** to the **Commission**, **Transpower** must also submit to the **Commission**-

- (a) a **verification report** relating to the proposal that is:
  - (i) prepared by a **verifier** engaged in accordance with Schedule J; and
  - (ii) prepared in accordance with the deed described in clause J5;
- (b) any information relating to the proposal provided to the **verifier** by or on behalf of **Transpower**:
  - (i) including any instructions as to how to interpret information provided to the **verifier** or details as to the source of the information; but
  - (ii) not including any information already provided by **Transpower** to the **Commission**, whether as part of the proposal or otherwise;
- (c) a certificate signed by the **verifier** stating that-
  - (i) the relevant parts of the proposal that **Transpower** is submitting to the **Commission** have been verified; and
  - (ii) the **verification report** was prepared in accordance with the deed described in clause J5.

### 7.6.2 Transpower must provide information to verifier

- (1) Before the **verifier** begins verification, **Transpower** must provide to the **verifier**-
  - (a) the materials that the **verifier** requires to verify the proposal in accordance with the terms of their engagement;
  - (b) summary information on the forecast **projects** and **programmes**, in the format agreed or specified pursuant to clause 2.2.1; and
  - (c) any other material that **Transpower** intends to submit to the **Commission**.
- (2) **Transpower** must provide to the **verifier**, within a reasonable time after the **verifier** requests it, any information that is requested by the **verifier** and that **Transpower** is reasonably able to provide.

## PART 8 CONSULTATION

### 8.1.1 Consultation by Commission

- (1) After receiving any **base capex proposal, listed project application, major capex proposal** or application for approval of **base capex** in respect of a **listed project** the **Commission**:
  - (a) must take all of the following actions-
    - (i) publish the relevant proposal or application;
    - (ii) make and publish a draft decision or decisions;
    - (iii) seek the written views of interested persons on anything so published; and
    - (iv) seek the written views of interested persons on others' submissions; and
  - (b) may seek the views of any person the **Commission** considers has expertise on a relevant matter and hold a conference at which the views of some or all interested persons may be sought orally or in other forms of presentation.
- (2) The **Commission** may take none, any or all of the actions listed in subclause (1) in evaluating applications received from **Transpower** or making decisions or calculations under:
  - (a) clause 3.3.3A;
  - (b) clause 3.3.6;
  - (c) clause 3.3.7;
  - (d) clause 3.3.8; or
  - (e) clause 3.3.9.
- (3) Where the **Commission** takes any of the actions referred to in subclause (1), it may do so in accordance with such timeframes and processes as it considers appropriate.

### 8.1.2 Base capex projects or programmes forecast to cost more than base capex threshold

For the purpose of clause 3.2.1(b), consultation by **Transpower** with interested persons must be-

- (a) of a scope commensurate with the proposed **project's** or **programme's** nature, complexity, impact and significance; and
- (b) undertaken by **Transpower** acting in accordance with the **policies** and processes specified in its **base capex proposal**.

### 8.1.3 Consultation on major capex projects

- (1) For the purpose of clause 3.3.1(3), subject to subclause (2)-
  - (a) the consultation programme for a **transmission investment** or **non-transmission solution** must make provision for consultation by **Transpower** prior to submitting a **major capex proposal** on such matters specified in Schedule I as are applicable; and
  - (b) the approach to ensure appropriate consideration of **non-transmission solutions** must make provision for consultation by **Transpower** prior to submitting a **major capex proposal** on such matters specified in Schedule I Division 2 as are applicable.
- (2) For the purpose of subclause (1), the consultation programme and approach referred to-
  - (a) must have regard to:
    - (i) the complexity, nature and quantum of expenditure associated with the **major capex project**;
    - (ii) the likely costs and benefits arising from consultation, taking into account various stakeholder perspectives including **Transpower**, industry participants, proponents of **non-transmission solutions**, end users of electricity, and the **Commission**;
    - (iii) the urgency of the **investment need** that is the subject of the **major capex project**, including the duration of time available until a decision to proceed with options to address the **investment need** is required;
    - (iv) co-ordination between the consultation programme and the approach to considering **non-transmission solutions** for the **major capex project** in question;
    - (v) the extent and nature of any relevant prior consultations;
  - (b) need not cover a matter specified in Schedule I where, on account of the **investment need** in question, the **Commission** is satisfied that it is reasonable to exclude the matter in the circumstances; and
  - (c) need not, in the case of a **major capex project** for an **anticipatory connection asset**,-
    - (i) include long list consultation; and
    - (ii) require **Transpower** to disclose any information that may reasonably be regarded as commercially sensitive and in respect of which **Transpower** is under an obligation not to disclose that is owed to the person who is, or who is expected to be, the other party to a **new investment contract**.

## PART 9 CERTIFICATION

### SUBPART 1 Base capex proposals

#### 9.1.1 Director certification – base capex proposals

In relation to all information provided in accordance with the **regulatory templates** and Schedule F with respect to a **base capex proposal**, no fewer than 2 **directors** of **Transpower** must each certify in writing, that having made all reasonable enquiries, it is his or her belief that-

- (a) the information was derived from and accurately represents, in all material respects, the operations of **Transpower**; and
- (b) the **base capex proposal** complies, in all material respects, with the requirements of clause 7.3.1.

### SUBPART 1A Listed project applications

#### 9.1.2 Chief executive officer certification – listed project applications

In relation to all information provided with a **listed project application**, the chief executive officer of **Transpower** must certify in writing that, having made all reasonable enquiries, it is his or her belief that:

- (a) the information provided in the application was derived from and accurately represents, in all material respects, the relevant operations of **Transpower**; and
- (b) the **base capex** in respect of the **listed project** was approved by **Transpower** in accordance with the applicable requirements of **Transpower's capital expenditure approval policies**.

### SUBPART 1B Opex proposals

#### 9.1.3 Director certification – opex proposals

In relation to all information provided in accordance with the **regulatory templates** and Schedule FA with respect to an **opex proposal**, no fewer than 2 **directors** of **Transpower** must each certify in writing, that having made all reasonable enquiries, it is his or her belief that-

- (a) the information was derived from and accurately represents, in all material respects, the operations of **Transpower**; and
- (b) the **opex proposal** complies, in all material respects, with the requirements of clause 7.3.2.

## SUBPART 2 Major capex proposals and major capex proposal amendments

### 9.2.1 Chief executive officer certification – major capex proposals and major capex proposal amendments

In relation to all information provided in accordance with Schedule G with respect to a **major capex proposal** or an amendment of a **major capex proposal**, the chief executive officer of **Transpower** must certify in writing, that having made all reasonable enquiries, it is his or her belief that-

- (a) the information was derived from and accurately represents, in all material respects, the operations of **Transpower**;
- (b) the **proposed investment** to which the information relates was approved in accordance with the applicable requirements of **Transpower's director** and management approval **policies**; and
- (c) the **major capex proposal** or amendment of a **major capex proposal** complies, in all material respects, with the requirements of clause 7.4.1 or 7.4.1A, as the case may be.

## SUBPART 3 Major capex project amendment and sunk costs applications

### 9.3.1 Chief executive officer certification – major capex project amendment and sunk costs applications

In relation to all information provided in accordance with Schedule H with respect to-

- (a) an application for amendment of components of an **approved major capex project**; or
- (b) an application for a **major capex sunk costs adjustment**,

the chief executive officer of **Transpower** must certify in writing, that having made all reasonable enquiries, it is his or her belief that-

- (c) the information was derived from and accurately represents, in all material respects, the operations of **Transpower**;
- (d) all parts of the **major capex project** to which the information relates have been approved in accordance with the applicable requirements of **Transpower's director** and management approval **policies**; and
- (e) the application complies, in all material respects, with the requirements of clause 7.4.2 or 7.4.3, as the case may be.

## SUBPART 4 Changes in opinion or matters of fact

### 9.4.1 Changes in opinion or matters of fact

- (1) Where-

- (a) a **director** or chief executive officer of **Transpower** has made a certification involving a matter of his or her opinion in accordance with this Part;
- (b) his or her opinion has changed before the **Commission's** decision in relation to the proposal or application in question; and
- (c) the change is likely to be material to the **Commission's** evaluation of the proposal or evaluation,

that **director** or chief executive officer must notify the **Commission** as soon as reasonably practicable.

(2) Where-

- (a) a **director** or chief executive officer of **Transpower** has made a certification involving a matter of fact in accordance with this Part;
- (b) before the **Commission's** decision in relation to the proposal or application in question, he or she-
  - (i) becomes aware that the fact is untrue; or
  - (ii) has significant cause to doubt the accuracy of that fact; and
- (c) that fact is likely to be material to the **Commission's** evaluation of the proposal or application,

that **director** or chief executive officer must notify the **Commission** as soon as reasonably practicable.

## SCHEDULE A    **BASE CAPEX PROPOSAL - EVALUATION CRITERIA**

### A1    **General evaluation of base capex proposals**

The **Commission** will have regard to the following factors when evaluating a **base capex proposal**:

- (a) whether the proposed **base capex allowances** have been prepared in accordance with **Transpower's policies** and planning standards for the **grid** and for each **base capex category**;
- (b) whether the **policies** and planning standards upon which the proposed **base capex allowances** rely are directed towards achieving cost-effective and efficient solutions;
- (c) the reasonableness of the key assumptions relevant to **base capex** relied upon, including-
  - (i) the method and information used to develop them;
  - (ii) how they were applied; and
  - (iii) their effect on the proposed **base capex allowances**;
- (d) whether **policies** regarding the need for, and prioritisation of **projects** and **programmes** demonstrate a risk-based approach consistent with good asset management practice;
- (e) the dependencies between the proposed **grid output measures** and the proposed **base capex allowances** at the level of the **grid** and for each **base capex category**;
- (f) the dependencies between the proposed **grid output targets** and the proposed **base capex allowances** at the level of the **grid** and for each **base capex category**;
- (g) the extent to which the **grid output targets** were met in the current and previous **regulatory period**;
- (h) the overall deliverability of the proposed **base capex** during the **regulatory period**;
- (i) mechanisms for controlling actual **capital expenditure** with respect to the proposed **base capex allowances** and achieving the proposed **grid output targets**;
- (j) the reasonableness and adequacy of any **asset replacement** models used to prepare the proposed **base capex allowances** including-
  - (i) inputs to the model; and

- (ii) the methods used to check the reasonableness of the forecasts and related expenditure;
- (k) the reasonableness of the key assumptions, key input data and forecasting methods used in determining demand forecasts;
- (l) the appropriateness of using those demand forecasts and other key assumptions in determining the proposed **base capex allowances**;
- (m) the type of efficiency improvements obtained in the current and previous **regulatory periods**; and
- (n) the scope for efficiency improvements during the **regulatory period** in question.

## A2 Evaluation of identified programmes

In evaluating a **base capex proposal**, the **Commission** will undertake a review of each **identified programme** and such a review will include evaluation of at least-

- (a) whether **policies** regarding the need for the **identified programme** and its priority demonstrate a risk-based approach consistent with good asset management practice and were applied appropriately;
- (b) whether other relevant **policies** and planning standards were applied appropriately;
- (c) **Transpower's** process, including its use of cost-benefit analyses, to determine the **identified programme's** reasonableness and cost-effectiveness;
- (d) **Transpower's** internal processes for challenging a need for an **identified programme** and the possible alternative solutions;
- (e) how **grid outputs**, key drivers, assumptions, and cost modelling were used to determine the forecast **capital expenditure** of the **identified programme**;
- (f) the capital costing methodology and formulation, including unit rate sources, the method used to test the efficiency of unit rates and the quantum of included contingencies;
- (g) the effect of the **identified programme's** forecast **capital expenditure** on other cost categories, including the relationship with **operating expenditure**;
- (h) links with other **projects or programmes**, whether proposed or in progress; and
- (i) the efficiency of the proposed approach to procurement of associated goods and services for the **identified programme**.

### A3 Evaluation techniques

In undertaking the evaluations described in clauses A1 and A2, the **Commission** may employ one or more of the following techniques:

- (a) process benchmarking;
- (b) process or functional modelling;
- (c) unit rate benchmarking;
- (d) trending or time-series analysis;
- (e) high level governance and process reviews;
- (f) internal benchmarking of forecast costs against costs in the current period;
- (g) **capital expenditure** category and **operating expenditure** category benchmarking;
- (h) **project** and **programme** sampling;
- (i) critiques or independent development of-
  - (i) demand forecasts;
  - (ii) labour unit cost forecasts;
  - (iii) materials forecasts;
  - (iv) plant forecasts; and
  - (v) equipment unit cost forecasts; and
- (j) any other technique or approach that the **Commission** considers appropriate in the circumstances.

### A4 Criteria for considering the low incentive rate base capex allowance

Where the **Commission** considers that a **base capex project** or **base capex programme** proposed by **Transpower** as a **low incentive rate base capex project** is likely to require **capital expenditure** greater than the **base capex threshold**, the **Commission** will take into account at least the following criteria in deciding whether to specify the **base capex project** or **base capex programme** as a **low incentive rate base capex project**:

- (a) whether there are viable alternatives that meet the same **investment need**; and
- (b) the magnitude of cost uncertainty of the **base capex project** or **base capex programme**.

#### A5 **Criteria for considering grid output measures**

The **Commission** will take into account at least the following criteria in considering **grid output measures**:

- (a) the extent to which the proposed **grid output measure** is a recognised measure of either or both of the following things:
  - (i) risk in the **supply of electricity transmission services**; and
  - (ii) performance of the **supply of electricity transmission services**;
- (b) the relationship(s) between the proposed **grid output measure** and **base capex, major capex** and **operating expenditure** including the extent to which the relationship(s) can be quantified and the strength of the relationship(s);
- (c) whether the proposed **grid output measure** was devised in accordance with the **policies** and processes referred to in the **base capex proposal**, including consultation processes; and
- (d) the extent to which the proposed **grid output measure** aligns with the business processes used by **Transpower** in its **supply of electricity transmission services**.

#### A6 **Criteria for considering revenue-linked grid output measures**

In addition to the criteria specified in clause A5, the **Commission** will take into account at least the following criteria in considering **revenue-linked grid output measures**:

- (a) the extent to which the proposed **revenue-linked grid output measure** is a recognised measure of **grid outputs** that are valued by **consumers**; and
- (b) whether the proposed **revenue-linked grid output measure** is quantifiable, controllable by **Transpower**, auditable and replicable over time.

#### A7 **Criteria for considering matters relating to revenue-linked grid output measures**

The **Commission** will take into account at least the following criteria in considering the **caps, collars, grid output incentive rate** and **grid output targets** in respect of each **revenue-linked grid output measure**:

- (a) the value that **consumers** place on the relevant **grid output measure** and the relationship between this value and the proposed **grid output incentive rate**;
- (b) quantification and strength of the relationship between **base capex** and the **grid output** both-
  - (i) within the **regulatory period** in question; and
  - (ii) over the longer term;

- (c) the extent of the likely effect of factors unrelated to **grid** investment that may affect the relevant **grid output**, such as-
  - (i) natural degradation in asset condition;
  - (ii) impact of changes in loading of the **grid**; and
  - (iii) extreme weather events;
- (d) the plausible range of the relevant **grid outputs** likely to be delivered taking into account the factors described in paragraphs (b) and (c)(c);
- (e) the relationship between the range described in paragraph (d) and the proposed **caps** and **collars**; and
- (f) the impact on return on capital implied by both the range described in paragraph (d) and the application of the proposed **caps, collars** and **grid output incentive rate**.

**A8 Criteria for considering base capex allowance adjustment mechanism**

Where the **Commission** considers specifying a **base capex allowance adjustment mechanism** it will take into account:

- (a) the cost and/or timing uncertainties of **E & D base capex projects** or **E & D base capex programmes**; and
- (b) the extent to which the cost and/or timing uncertainties are linked to-
  - (i) a certain level of demand or connection of new generation; and/or
  - (ii) any other drivers of **E & D base capex**.

## SCHEDULE B REVENUE ADJUSTMENTS

### DIVISION 1 BASE CAPEX AND GRID OUTPUT ADJUSTMENTS

#### B1 Calculation of base capex expenditure adjustment

- (1) The **base capex expenditure adjustment** is the sum of the **standard incentive rate base capex expenditure adjustment** and the **low incentive rate base capex expenditure adjustment**, less the product of the **base capex standard incentive rate** multiplied by (any **insurance entitlements** forecast to be applied to reduce the value of a **commissioned** asset under clause 2.2.10(1)(i) of the Transpower Input Methodologies Determination 2010 in respect of the **base capex**).
- (2) Subject to subclause (4), the quantum of the **standard incentive rate base capex expenditure adjustment** for a **disclosure** year is calculated in accordance with the following formula:  $a(b-c-g)$

Term	Description	Specification
<i>a</i>	<b>base capex standard incentive rate</b>	$\left(1 - \frac{1}{(1+x)^6}\right) \times 100\%$ <p>where:</p> <p>'x' is the mid-point estimate of vanilla <b>WACC</b> determined in accordance with clause 3.5.1 of the Transpower Input Methodologies Determination 2010</p>
<i>b</i>	<b>adjusted standard incentive rate base capex allowance</b> for the <b>disclosure</b> year	$d + d' + e + f + h$
<i>c</i>	aggregate <b>capital expenditure</b> that is <b>base capex</b> subject to the <b>base capex standard incentive rate</b> in the <b>disclosure</b> year	<b>base capex</b> annual information required by an <b>ID determination</b> or a <b>s 53ZD notice</b>
<i>d</i>	<b>standard incentive rate base capex allowance</b> for the <b>disclosure</b> year	in accordance with clause 2.2.2(1)(a) and the <b>base capex</b>

		<b>allowance adjustment mechanism</b>
<i>d'</i>	amount of approved base capex in respect of listed projects subject to the <b>base capex standard incentive rate</b> for the <b>disclosure year</b>	in accordance with clause 3.2.3(5)(d)
<i>e</i>	adjustment correcting for disparity between <b>forecast CPI</b> that applied when the <b>standard incentive rate base capex allowance</b> was determined and actual <b>CPI</b> in respect of <i>d</i> and <i>d'</i>	<b>base capex</b> annual information required by an <b>ID determination</b> or a <b>s 53ZD notice</b>
<i>f</i>	adjustment correcting for disparity between <b>forecast FX rates</b> that applied when the <b>standard incentive rate base capex allowance</b> was determined and <b>actual FX rates</b> for each relevant currency in respect of <i>d</i> and <i>d'</i>	<b>base capex</b> annual information required by an <b>ID determination</b> or a <b>s 53ZD notice</b>
<i>g</i>	aggregate amount of <b>adjusted standard incentive rate base capex allowance <i>b</i></b> to which the <b>base capex standard incentive rate <i>a</i></b> does not apply, if the expenditure was included in the <b>standard incentive rate base capex allowance <i>d</i></b> or in approved <b>base capex of listed projects <i>d'</i></b> , and where either <b>base capex</b> has expanded in scope and has become <b>major capex</b> or where <b>base capex</b> included in <i>d</i> or <i>d'</i> has cost elements that vary significantly due to factors beyond the control of <b>Transpower</b>	<b>base capex</b> annual information required by an <b>ID determination</b> or a <b>s 53ZD notice</b>
<i>h</i>	adjustment, after correcting for the applicable portions of <i>e</i> and <i>f</i> , in respect of the portion of <i>d</i> that is subject to the <b>base capex allowance adjustment mechanism</b>	specified in an <b>IPP determination</b>
(3)	Subject to subclause (4), the quantum of the <b>low incentive rate base capex expenditure adjustment</b> for a <b>disclosure year</b> is calculated in accordance with the following formula: $a^*(b^* - c^* - g^*)$	

<b>Term</b>	<b>Description</b>	<b>Specification</b>
<i>a</i> *	<b>base capex low incentive rate</b>	15%
<i>b</i> *	<b>adjusted low incentive rate base capex allowance</b> for the <b>disclosure year</b>	$d^* + d'^* + e^* + f^*$
<i>c</i> *	aggregate <b>capital expenditure</b> that is <b>base capex</b> subject to the <b>base capex low incentive rate</b> in the <b>disclosure year</b>	base capex annual information required by an <b>ID determination</b> or a s 53ZD notice
<i>d</i> *	<b>low incentive rate base capex allowance</b> for the <b>disclosure year</b>	in accordance with clause 2.2.2(1)(a)
<i>d'</i> *	amount of approved <b>base capex</b> in respect of <b>listed projects</b> subject to the <b>base capex low incentive rate</b> for the <b>disclosure year</b>	in accordance with clause 3.2.3(5)(d)
<i>e</i> *	adjustment correcting for disparity between <b>forecast CPI</b> that applied when the <b>low incentive rate base capex allowance</b> was determined and actual <b>CPI</b> in respect of <i>d</i> * and <i>d'</i> *	<b>base capex</b> information required by an <b>ID determination</b> or a s 53ZD notice
<i>f</i> *	adjustment correcting for disparity between <b>forecast FX rates</b> that applied when the <b>low incentive rate base capex allowance</b> was determined and <b>actual FX rates</b> for each relevant currency in respect of <i>d</i> * and <i>d'</i> *	<b>base capex</b> information required by an <b>ID determination</b> or a s 53ZD notice

$g^*$  aggregate amount of **adjusted low incentive rate base capex allowance  $b^*$**  to which **base capex low incentive rate  $a^*$**  does not apply, if the expenditure was included in the **low incentive rate base capex allowance  $d^*$**  or in approved **base capex of listed projects  $d'^*$** , and where either **base capex** has expanded in scope and become **major capex** or where **base capex** included in  $d^*$  or  $d'^*$  has cost elements that vary significantly due to factors beyond the control of **Transpower**

**base capex** annual information required by an **ID determination** or a **s 53ZD notice**

- (4) For the purposes of subclauses (2) and (3), in calculating the amounts or values for one or more of  $c$ ,  $e$ ,  $f$ ,  $g$ ,  $c^*$ ,  $e^*$ ,  $f^*$  and  $g^*$ , the **Commission** need not use the amounts or values in the **base capex** annual information provided by **Transpower** and may instead, having regard to the views of interested persons, use the amounts or values that it considers are correct in the circumstances.

## B2 Calculation of annual grid output adjustment

- (1) Subject to subclause (2), the quantum of the **grid output adjustment** is calculated for a **disclosure year** in accordance with the following table:

Term	Description	Specification
	<b>grid output adjustment</b>	$\sum i$
$i$	<b>grid output adjustment</b> in respect of the <b>revenue-linked grid output measure</b> in question	$\max(l(j-n), \min(l(m-n), l(k-n)))$
$j$	<b>collar</b> in respect of the <b>revenue-linked grid output measure</b> in question for the disclosure year	in accordance with clause 2.2.2(1)(d)(ii)
$k$	<b>cap</b> in respect of the <b>revenue-linked grid output measure</b> in question for the disclosure year	in accordance with clause 2.2.2(1)(d)(i)

<i>l</i>	<b>grid output incentive rate</b> in respect of the <b>revenue-linked grid output measure</b> in question	in accordance with clause 2.2.2(1)(d)(iii)
<i>m</i>	output achieved during the <b>disclosure year</b> in respect of the <b>revenue-linked grid output measure</b> in question	<b>base capex</b> information required by an <b>ID determination</b> or a s 53ZD notice
<i>n</i>	<b>grid output target</b> in respect of the <b>revenue-linked grid output measure</b> in question for the disclosure year	in accordance with clause 2.2.2(1)(d)(iv)

- (2) For the purpose of subclause (1), in calculating the value for *m*, the **Commission** need not use the value for *m* disclosed by **Transpower** in the **base capex** annual information and may instead, having regard to the views of interested persons, use the value that it considers is correct in the circumstances.

## DIVISION 2 MAJOR CAPEX ADJUSTMENTS

### B3 Calculation of major capex expenditure and output adjustment

- (1) The amount of the **major capex expenditure and output adjustment** is calculated in accordance with this clause.
- (2) The amount of the adjustment for the **project** is zero if the amount of **capex** for the **project** is:
- (a) less than or equal to the **project's P70**; and
  - (b) equal to or more than the lesser of the **project's P30** and the **major capex allowance** less **exempt major capex**.
- (3) In any other case, and subject to subclause (4), the amount of the adjustment for the **project** is calculated in accordance with the following formula:

$$a(b - t - c) - i$$

<b>Term</b>	<b>Description</b>	<b>Specification</b>
<i>a</i>	<b>major capex incentive rate</b> for the <b>approved major capex project</b>	in accordance with clause 3.3.5(7)
<i>b</i>	<b>adjusted major capex allowance</b> for the	$d + e + f$

**approved major capex project**

<i>c</i>	amount of <b>capital expenditure</b> for the <b>approved major capex project</b>	<b>major capex</b> information required by an ID determination or a s 53ZD notice
<i>d</i>	<p>(a) if <i>c</i> is greater than the <b>project's P70</b>, then <i>d</i> is the <b>P70</b>;</p> <p>(b) if the <b>project's major capex allowance</b> minus <b>exempt major capex</b> is greater than the <b>project's P30</b>, and <i>c</i> is less than the <b>project's P30</b>, then <i>d</i> is the <b>P30</b>; or</p> <p>(c) if the <b>project's major capex allowance</b> minus <b>exempt major capex</b> is less than the <b>project's P30</b>, and <i>c</i> is less than <b>major capex allowance</b> minus <b>exempt major capex</b>, then <i>d</i> is the <b>major capex allowance</b> minus the <b>exempt major capex</b></p>	in accordance with clause 3.3.5(7)
<i>e</i>	adjustment correcting for disparity between <b>forecast CPI</b> that applied when the <b>major capex allowance</b> for the <b>approved major capex project</b> was determined	<b>major capex</b> information required by an ID determination or a s 53ZD notice

and actual **CPI** in respect of *d*

<i>f</i>	adjustment correcting for disparity between <b>forecast FX rates</b> that applied when the <b>major capex allowance</b> for the <b>approved major capex project</b> was determined and <b>actual FX rates</b> for each relevant currency in respect of <i>d</i>	<b>major capex</b> information required by an <b>ID determination</b> or a <b>s 53ZD notice</b>
<i>i</i>	the product of the <b>major capex incentive rate</b> for the <b>approved major capex project</b> multiplied by (any <b>insurance entitlements</b> forecast to be applied to reduce the value of a <b>commissioned</b> asset under clause 2.2.10(1)(i) of the Transpower Input Methodologies Determination 2010 in respect of the <b>approved major capex project</b> )	<b>major capex</b> information required by an <b>ID determination</b> or a <b>s 53ZD notice</b>
<i>t</i>	estimated part of the <b>major capex allowance</b> for the approved <b>major capex project</b> that relates to the <b>approved major capex project outputs</b> not delivered	<b>major capex</b> annual information required by an <b>ID determination</b> or a <b>s 53ZD notice</b>

- (4) For the purposes of subclause (3), in calculating the amounts or values for one or more of *c*, *e*, *f* and *t*, the **Commission** need not use the amounts or values in the **major capex** information provided by **Transpower** in the **major capex** annual information and may instead, having regard to the views of interested persons, use the amounts or values that it considers are correct in the circumstances.

## SCHEDULE C MAJOR CAPEX PROPOSAL - EVALUATION CRITERIA

### C1 Proposed investment – investment test and components

- (1) When deciding whether to approve a **major capex project** or a **staging project**, the **Commission** must evaluate whether the **proposed investment** satisfies the **investment test**.
- (2) For the purposes of deciding whether a **proposed investment** that is a **major capex project (staged)** satisfies the **investment test**, the **Commission** will:
  - (a) where **Transpower** seeks approval for the first **staging project** of a **major capex project (staged)**, evaluate whether the **investment test** is satisfied for all proposed **staging projects** of the **major capex project (staged)**; and
  - (b) where **Transpower** seeks approval for a subsequent **staging project** of a **major capex project (staged)** that is a continuation of an existing **major capex project (staged)**, evaluate whether the **investment test** is satisfied for all proposed remaining **staging projects** of the **major capex project (staged)**.
- (3) The **Commission** will also evaluate, to the extent applicable to the **transmission investment** or **non-transmission solution** in question, the following components of the **major capex project** or **staging project(s)** for which **Transpower** seeks approval in its **major capex proposal**:
  - (a) **major capex allowance**;
  - (b) **maximum recoverable costs**;
  - (c) **recovery scheme**;
  - (d) **major capex project outputs**;
  - (e) **approval expiry date**;
  - (f) **major capex incentive rate**;
  - (g) **exempt major capex**;
  - (h) **commissioning date assumption**; and
  - (i) **completion date assumption**.
- (4) The **Commission** may only approve a **major capex project** or a **staging project** after carrying out the evaluations under subclauses (1) to (3), if it is satisfied-
  - (a) that the **proposed investment** satisfies the **investment test**; and
  - (b) with the components listed in subclause (3) taking account of its ability to determine the **major capex allowance**, **major capex incentive rate** and **exempt major capex**.

## C2 **General evaluation of major capex proposal**

The **Commission** must have regard to at least one of the following factors when evaluating a **major capex proposal**:

- (a) whether the **proposed investment and investment options**:
  - (i) reflect **good electricity industry practice**;
  - (ii) are technically feasible;
  - (iii) are able to be implemented in terms of the statutory planning process under the Resource Management Act 1991, other regulatory consents, and obtaining property and access rights; and
  - (iv) can be integrated into system and market operations;
- (b) whether the estimated time required for construction, consultation, meeting statutory planning and other regulatory requirements, and obtaining property and access rights prior to a proposed **commissioning date** or **completion date** is reasonable;
- (c) whether the key assumptions around outage planning are reasonable;
- (d) the extent to which, in complying with clause 3.3.1(9) with respect to the consultation programme or the approach for consideration of **non-transmission solutions**, **Transpower** has had regard to the views of interested persons; and
- (e) the impact of the **sensitivity analysis** on **electricity market benefit or cost elements** of the **proposed investment and investment options**.

## C3 **Evaluation of major capex allowance and maximum recoverable costs**

The **Commission** must have regard to at least one of the following factors when evaluating the **major capex allowance** and **maximum recoverable costs** for the **major capex project** or **staging project** that **Transpower** submits for approval in its **major capex proposal**:

- (a) how **major capex project outputs**, key drivers, key assumptions, and cost modelling were used to determine the **P50** and **major capex allowance** or **maximum recoverable costs**;
- (b) the capital costing methodology and formulation, including unit rate sources, the method used to test the efficiency of unit rates and the level of contingencies included;
- (c) the impact of forecast costs on other costs of **Transpower**, including the relationship with **operating expenditure**;
- (d) mechanisms for controlling actual **capital expenditure** with respect to the **major capex allowance** or **maximum recoverable costs**; and

- (e) the efficiency of the proposed approach to procurement of goods and services.

#### C4 **Evaluation of approval expiry date**

The **Commission** must have regard to at least one of the following factors when evaluating a proposed **approval expiry date**:

- (a) the effect of the proposed **approval expiry date** on the quantified and unquantified costs and benefits under the **investment test**;
- (b) the effect of the changes to the **commissioning date assumption** or **completion date assumption** on the **expected net electricity market benefit** under the **investment test**;
- (c) the effect of the proposed **approval expiry date** and the **commissioning date assumption** or **completion date assumption** in the **major capex proposal**;
- (d) the sensitivity of the proposed **approval expiry date** to the key assumptions used in the **major capex proposal**;
- (e) **demand and generation scenarios**; and
- (f) **sensitivity analysis**.

#### C5 **Evaluation of major capex project outputs**

The **Commission** must have regard to at least one of the following factors when evaluating proposed **major capex project outputs**:

- (a) the extent to which the **major capex project outputs** reflect the nature, quantum and functional capability of the **transmission investment** assets to be **commissioned**;
- (b) the extent to which the **major capex project outputs** reflect the change in the functional capability of the **grid** as a result of undertaking the proposed **major capex project** or **staging project**;
- (c) the extent to which the **major capex project outputs** are consistent with key assumptions used in determining the **major capex allowance** or **maximum recoverable costs**;
- (d) the nature of the **electricity market benefit or cost elements** directly related to the **supply of electricity transmission services** taken into account in applying the **investment test**; and
- (e) in the case of a **non-transmission solution**-
  - (i) the extent to which the **major capex project outputs** reflect the nature and quantum of any product or service provided to **Transpower**; and

- (ii) the extent to which the **major capex project outputs** reflect the change in the functional capability of the **grid** resulting from the product or service provided to **Transpower**.

#### C6 **Evaluation of major capex incentive rate**

The **Commission** must have regard to at least one of the following factors when evaluating proposed **major capex incentive rates**:

- (a) the magnitude of the cost of the **major capex project** relative to the aggregate cost of other **major capex projects**;
- (b) the magnitude of the cost uncertainty of the **major capex project** relative to the cost uncertainty of other **major capex projects**.

#### C7 **Evaluation techniques**

In undertaking the evaluations described in the clauses in this schedule, the **Commission** may employ one or more of the following techniques:

- (a) analysis of powerflow and dynamics in the **grid**, in the context of the **proposed investment, investment options** and **modelled projects**;
- (b) detailed critiques of conceptual designs to the extent necessary to derive credible cost and time estimates, including forecast **commissioning dates** or **completion dates**;
- (c) analysis and review of the calculation of costs and benefits associated with the **proposed investment** and **investment options** including, but not limited to:
  - (i) calculation of loss benefits;
  - (ii) reductions in fuel consumption by **generators** of electricity;
  - (iii) enabled lower cost generation;
  - (iv) reliability benefits;
  - (v) **competition effects**; and
  - (vi) **consequential opex**;
- (d) critiques of market development scenarios contained in **major capex proposals**;
- (e) unit rate benchmarking; and
- (f) any other technique or approach that the **Commission** considers appropriate in the circumstances.

## SCHEDULE D MAJOR CAPEX - INVESTMENT TEST

### DIVISION 1 INVESTMENT TEST

#### D1 Major capex - investment test

- (1) The **investment test** is satisfied in respect of a **proposed investment** if the **proposed investment** is an **investment option** that-
  - (a) is sufficiently robust under **sensitivity analysis**;
  - (b) has a positive **expected net electricity market benefit** unless it is designed to meet an **investment need** the satisfaction of which is necessary to meet the deterministic limb of the **grid reliability standards**; and
  - (c) has-
    - (i) the highest **expected net electricity market benefit**, where only quantified **electricity market benefit or cost elements** are taken into account; or
    - (ii) the highest **expected net electricity market benefit** including a qualitative assessment to take into account the contribution of associated unquantified **electricity market benefit or cost elements**, if the **proposed investment** has a similar **expected net electricity market benefit** to the **investment option** with the highest **expected net electricity market benefit** where only quantified **electricity market benefit or cost elements** are taken into account.
- (2) For the purpose of subclause (1)(c)(ii)-
  - (a) a similar **expected net electricity market benefit** is one where the difference in quantum, subject to subclause (3), is 10% or less of the aggregate **project costs** of the **investment option** to which the **proposed investment** is compared; and
  - (b) an **electricity market benefit or cost element** may be treated as unquantified where-
    - (i) the cost of calculating its quantum in accordance with clause D6(4) is likely to be disproportionately large relative to the quantum; or
    - (ii) its expected value cannot be calculated in accordance with clause D6(4) with an appropriate level of certainty due to the extent of uncertainties in underlying assumptions or calculation approaches.
- (3) For the purpose of subclause (2)(a), the **Commission** may, at its discretion, adopt an alternative percentage to 10% as proposed by **Transpower**.

## DIVISION 2 MEANING OF TERMS USED IN INVESTMENT TEST

### D2 Expected net electricity market benefit

- (1) **Expected net electricity market benefit** means, in respect of an **investment option**, the weighted average of the **net electricity market benefit** under each **relevant demand and generation scenario**, where each **relevant demand and generation scenario** is accorded the explicit or implicit weighting assigned to it by the party who developed the scenario, unless **Transpower** considers that alternative weightings should apply and has consulted on these as part of its consultation on the short list of **investment options**.
- (2) **Net electricity market benefit** means, in respect of an **investment option** applied to a **demand and generation scenario**, its aggregated quantum of each **electricity market benefit or cost element** less its aggregated quantum of each **project cost**.

### D3 Demand and generation scenario, demand and generation scenario variation, counterfactual case, and relevant demand and generation scenario

- (1) **Demand and generation scenario** means a description of a hypothetical future situation relating to forecast electricity demand and generation published by the Ministry of Business, Innovation and Employment (or other agency which subsequently assumes the responsibility) for the purpose of the preparation or evaluation of **major capex proposals**.
- (2) **Demand and generation scenario variation** means a feasible and reasonable variation on a **demand and generation scenario** that reasonably has regard to the views of interested persons.
- (3) **Counterfactual case** means a feasible and reasonable hypothetical future generation option where no **major capex** is incurred.
- (4) Each variation described in subclause (2) or option described in subclause (3) must be feasible and reasonable with regard to at least the following factors:
  - (a) existing and forecast demand;
  - (b) the **grid reliability standards**;
  - (c) the **value of expected unserved energy**;
  - (d) transfer capacities and capabilities of the **grid**;
  - (e) the cost of supplying sufficient **ancillary services**;
  - (f) the cost of losses necessarily incurred in efficiently meeting demand;
  - (g) **operating expenditure** incurred in efficiently meeting demand by means of **existing assets, committed projects, decommissioned assets and modelled projects**;

- (h) the capital cost of efficiently meeting demand by means of **modelled projects**;
  - (i) the timing of decommissioning an asset or removing or re-rating a **decommissioned asset**; and
  - (j) in the case of a **demand and generation scenario variation** only, the likely range of **investment options** to which the **investment test** relates.
- (5) The following are **relevant demand and generation scenarios**:
- (a) for any **demand and generation scenario** for which there is a variation under subclause (2), the **demand and generation scenario variation** for that scenario; and
  - (b) for any **demand and generation scenario** for which there is no variation under subclause (2), that **demand and generation scenario**.

#### D4 **Costs or benefits**

- (1) **Electricity market benefit or cost element** means, subject to subclause (3), a change relative to the value of that element in the **counterfactual case**, in any of the following things received or incurred by **consumers** during the **calculation period** under the **demand and generation scenario** in question that will affect **net electricity market benefits**:
- (a) fuel costs incurred by **generators** in relation to **existing assets, committed projects** and **modelled projects**;
  - (b) the cost of involuntary demand curtailment borne by end users of electricity;
  - (c) the costs of demand-side management;
  - (d) capital costs of **modelled projects**;
  - (e) costs resulting from operations and maintenance expenditure on **committed projects, existing assets** and **modelled projects**;
  - (f) the cost of **ancillary services** including **system operator** costs;
  - (g) the cost of losses, including local losses;
  - (h) **consequential opex**;
  - (i) any real option value;
  - (j) subject to subclause (5), the value of any benefit associated with any financial contribution that a third party has committed to make towards the costs of the **project**;
  - (k) subsidies or other benefits-
    - (i) relating to anything listed in paragraphs (a) to (j); and

- (ii) provided under or arising pursuant to all electricity-related legislation and electricity-related administrative determinations;
  - (l) **competition effects**; and
  - (m) any other benefit or cost occurring in the electricity market proposed by **Transpower** prior to its consultation on the short list of **investment options** and agreed to by the **Commission**.
- (2) **Project cost** means any of the following things reasonably incurred by **Transpower** prior to or during the **calculation period** in undertaking a **major capex project**:
  - (a) **capital expenditure** incurred, including **capital expenditure** in relation to land specified in subclause (6), prior to the date implied by the **commissioning date assumption** for assets associated with the **investment option**;
  - (b) amounts payable to a third party in relation to its testing of assets associated with the **investment option**;
  - (c) an amount reasonably related to the **commissioning** of assets associated with the **investment option**;
  - (d) operating, maintenance and dismantling costs associated with the **investment option**;
  - (e) reasonable costs of complying with or arising pursuant to all applicable existing and reasonably anticipated legislation relating to the approval for and undertaking of an **investment option**;
  - (f) reasonable costs of complying with or arising pursuant to administrative requirements relating to the approval for and undertaking of an **investment option**, including costs relating to the preparation of a **major capex proposal**; and
  - (g) any other reasonable costs incurred by **Transpower** associated with the **investment option**.
- (3) For the purpose of subclause (1), an **electricity market benefit or cost element** excludes any **project cost** incurred by **Transpower** specified in subclause (2).
- (4) For the purpose of subclause (1)(i), real option value means the value attaching to the flexibility of a participant in the electricity market to make investment decisions, relating to an overall investment, in phases, where the value reflects the expected relative reduction of future costs to future benefits due to the making of those investment decisions based on information available in the future but presently unavailable or uncertain.
- (5) For the purpose of subclause (1)(j), the value of any such benefit may not exceed the amount of the contribution committed by the third party.

- (6) The land referred to in subclause (2)(a) is land that, at the time of the **major capex proposal**, is **commissioned** but which is not used by **Transpower** to provide **electricity transmission services**.

#### D5 **Competition effects**

**Competition effects** means the value of the expected change in economic surplus due to a change in competition among participants in the electricity market as a result of a **major capex project** undertaken by **Transpower**, which must exclude any expected change in economic surplus due to a change in another **electricity market benefit or cost element** listed in clause D4(1).

#### D6 **Quantification of costs and benefits**

- (1) The quantum of a **project cost** incurred prior to the **calculation period** must be calculated using compounding of the **project cost** over the period from the date it was incurred to the start of the **calculation period** using the **discount rate**.
- (2) The quantum of an **electricity market benefit or cost element** received or incurred during the **calculation period** must be calculated using discounting of the **electricity market benefit or cost element** over the **calculation period** using the **discount rate**.
- (3) **Discount rate** means-
  - (a) a standard rate of 5%; or
  - (b) a non-standard rate other than 5% which is appropriate in the circumstances and subject to consultation under clause 13.
- (4) The quantum of an **electricity market benefit or cost element** or **project cost** must be calculated using its expected value, which is the probability-weighted average of the possible values of the cost or benefit where the probability weightings reflect the uncertainties in underlying assumptions or calculation approaches.
- (5) The cost of involuntary demand curtailment borne by end users of electricity is the expected quantity of curtailed demand multiplied by the **value of expected unserved energy**.
- (6) The quantum of a **project cost** must be calculated using **good electricity industry practice**.

#### D7 **Sensitivity analysis**

- (1) **Sensitivity analysis** means consideration, save where it is neither reasonably practicable nor reasonably necessary, of the effect on quantum of variations in the following parameters, taking into account their probability of occurrence:
  - (a) forecast demand;

- (b) size, timing, location, fuel costs and operating and maintenance costs, relevant to **existing assets, committed projects, modelled projects** and the **investment option** in question;
  - (c) capital cost of the **investment option** in question (including variations up to proposed **major capex allowance**) and **modelled projects**;
  - (d) timing of decommissioning, removing or de-rating **decommissioned assets**;
  - (e) subject to subclause (2), the **value of expected unserved energy**;
  - (f) **discount rate**;
  - (g) range of hydrological inflow sequences;
  - (h) **relevant demand and generation scenario** probability weightings;
  - (i) in relation to any **competition effects** associated with an **investment option, generator** offering and demand-side bidding strategies; and
  - (j) any other variables that **Transpower** considers to be relatively uncertain.
- (2) For the purpose of subclause (1)(e), where paragraph (b) of the definition of **value of expected unserved energy** is relied on, **sensitivity analysis** must be undertaken in respect of variations in both the value described in that paragraph and the value described in paragraph (a) of the definition of **value of expected unserved energy**.
- (3) For the purpose of subclause (1)(f), **sensitivity analysis** must be undertaken in respect of the following **discount rates**-
- (a) 3%;
  - (b) the standard rate of 5%;
  - (c) 7%; and
  - (d) any non-standard rate other than 5% which has been adopted by **Transpower**.

## D8 **Assets and projects**

- (1) **Committed project** means assets that are likely to be **commissioned** during the **calculation period** and-
- (a) in relation to which all of the following are satisfied:
    - (i) the proponent has obtained all required planning consents, construction approvals, and licences, and fulfilled any other regulatory requirement that must be met before commencing construction;
    - (ii) construction has commenced or a firm commencement date for construction has been set;

- (iii) the proponent has acquired or executed an agreement to acquire land (or commenced legal proceedings to acquire land), or has executed an agreement for the leasing of land, for the purposes of construction;
    - (iv) contracts for supply and construction of the major components of the plant and equipment (including any generating units, turbines, boilers, transmission towers, conductors, termination station equipment) have been executed (i.e. all the necessary formal legal requirements have been observed to make the contract valid and complete); and
    - (v) if required, contracts for the financing of the project, including any debt plans, have been executed (i.e. all the necessary formal legal requirements have been observed to make the contract valid and complete); or
  - (b) that is an approved investment (as 'approved investment' is defined in the **code**).
- (2) **Decommissioned asset** means an existing asset in relation to which-
- (a) the following things are satisfied:
    - (i) a final decision to decommission, remove or de-rate the existing asset after a specified date has been made and publicly announced; and
    - (ii) firm arrangement to directly or indirectly facilitate the decommissioning, removal or de-rating of the existing asset has been made;
  - (b) consents or contracts for its operation and maintenance have-
    - (i) been terminated; or
    - (ii) expired with no reasonable prospect of renewal; or
  - (c) agreements for early termination of consents or contracts for its operation and maintenance have been executed.
- (3) **Existing asset** means any asset in operation at the time a **major capex proposal** is made.
- (4) **Modelled project** means assets, other than those that are part of an **investment option**-
- (a) which are likely to exist-
    - (i) as part of a **demand and generation scenario**; and
    - (ii) during the **calculation period** for any **investment option** based on that scenario; and
  - (b) for which the likelihood, nature and timing of their existence are affected by an **investment option** proceeding.

## SCHEDULE E     **INTEGRATED TRANSMISSION PLAN**

### E1     **Information to be included in integrated transmission plan**

- (1) The information that must be included is:
  - (a) an **ITP narrative**; and
  - (b) **ITP supporting documents**.
- (2) The information listed in this schedule in relation to the **ITP narrative** is, unless otherwise stated, required in respect of a period of at least ten **disclosure years** commencing on the first day of the next **regulatory period**.
- (3) The robustness of information provided must be commensurate with the degree of certainty **Transpower** may be reasonably expected to have in respect of it.

### E2     **Information to be included in the ITP narrative**

- (1) With reference, where relevant, to the information contained in the **ITP supporting documents**, a high level-
  - (a) overview of the expenditure and outputs which are proposed for the first **regulatory period** to which the **ITP narrative** relates coinciding with the **disclosure year** and forecast expenditure needs and outputs over the next **regulatory period**;
  - (b) overview of the key assumptions and scenarios used to determine forecast expenditure and **grid outputs**;
  - (c) assessment of the key uncertainties in the key assumptions, and forecast expenditure and **grid outputs**;
  - (d) assessment of the key risks affecting forecast expenditure;
  - (e) assessment of how the key uncertainties and key risks will affect **Transpower's** ability to deliver the forecast **grid outputs**;
  - (f) description of the proposed measures to manage and mitigate the key uncertainties and key risks;
  - (g) description of the key relationships, including any synergies or trade-offs, within and between the following:
    - (i) **projects** and **programmes** assumed for the purpose of determining the forecast expenditure; and
    - (ii) the forecast **grid outputs**; and

- (h) explanations of how key aspects of the **ITP narrative** take account of any changes in **Transpower's** strategic directions or scenarios since the publication of the previous **ITP narrative**, including by reference to any new reports by **Transpower** on strategic directions or scenarios.
- (2) Forecast expenditure in the form of a schedule in respect of each **disclosure year** for-
  - (a) **operating expenditure** (disaggregated by major areas of expenditure);
  - (b) **base capex** (disaggregated by major areas of expenditure); and
  - (c) approved **major capex** (disaggregated by project);
- (3) Forecast **grid outputs** in the form of a schedule in respect of each **disclosure year** for-
  - (a) each **revenue-linked grid output measure** described in the **base capex proposal** relating to the first **regulatory period** to which the **ITP narrative** relates;
  - (b) all proposed **grid output measures** other than those referred to in (a) above described in that **base capex proposal** relating to the first **regulatory period**; and
  - (c) **major capex project outputs** assumed to be delivered by each approved **major capex project**;
- (4) A summary of **major capex projects** under development, including:
  - (a) a summary of the key issues being addressed with reference to the planning report which is an **ITP supporting document**;
  - (b) estimates of likely **capital expenditure**; and
  - (c) estimates of project timings, including those relating to consultation periods, submissions for approval, construction, and **commissioning**.

### E3 **ITP supporting documents**

The following **documents**, prepared or updated no more than two years before the submission date-

- (a) an asset management plan that includes the information specified in clause E4;
- (b) a planning report that includes the information specified in clause E5;
- (c) a report setting out **Transpower's** output and performance objectives that includes the information specified in clause E6.

**E4 Information to be included in the asset management plan**

- (1) Overall asset management strategy and objectives;
- (2) Overall asset risk management framework; and
- (3) Asset management plans for each asset class covering:
  - (a) specifications for assets life cycle activities;
  - (b) general condition of existing assets;
  - (c) intended **programmes** of asset management works;
  - (d) routine maintenance and repair plans for assets; and
  - (e) **programmes** for routine maintenance and repair plans.

**E5 Information to be included in the planning report**

- (1) The capabilities of the existing **grid**;
- (2) Demand and generation forecasts for the forthcoming 10 years;
- (3) The **grid's** ability to meet future demand and generation needs;
- (4) The role of the **grid** in facilitating generation; and
- (5) **Grid** investment that may be required to meet future needs for the next 10 years and beyond, by way of-
  - (a) **grid** backbone transmission plans for the main North and South Island transmission corridors and for the HVDC link; and
  - (b) a set of regional plans.

**E6 Information to be included in the report on output and performance objectives**

- (1) A longer term view of the **grid outputs** and associated **grid** performance that will be economic to achieve, taking account of-
  - (a) performance expectations of end users of electricity, including in relation to the value of unserved energy;
  - (b) the costs of delivering changes in the level of **grid outputs**;
  - (c) the impact of committed expenditure on **grid outputs**; and
  - (d) any forecast degradation in asset condition or performance which will affect **grid outputs**;
- (2) A detailed description on the analysis, assumptions and approach used to determine the longer term view; and
- (3) An approach to convert the longer term view to appropriate shorter term objectives for **grid outputs**.

## SCHEDULE F      **BASE CAPEX PROPOSAL - QUALITATIVE INFORMATION**

### F1      **Qualitative information required in a base capex proposal**

For the purpose of clause 7.3.1(1)(b), a **base capex proposal** must, in addition to the other things specified in that clause, include all the information listed or described in this schedule. The information listed or described in this schedule is, unless otherwise stated, required in respect of the **IPP regulatory period**.

### F2      **List of identified programmes, listed projects, low incentive rate base capex projects and E & D base capex projects**

- (1) Identify all proposed **identified programmes** and explain how they were selected with reference to the categories or criteria agreed or specified under clause 2.2.1;
- (2) Identify all proposed **listed projects** and explain why they meet the criteria for **listed projects** set out in clause 2.2.2(8);
- (3) Identify all proposed **low incentive rate base capex projects** and explain-
  - (a) why each is expected to require **capital expenditure** exceeding \$30 million;
  - (b) the extent to which there are viable alternatives to meet the same **investment need**; and
  - (c) the magnitude of the cost uncertainty.
- (4) Identify all **E & D base capex projects** or **E & D base capex programmes** that **Transpower** considers should be subject to the **base capex allowance adjustment mechanism** and explain the extent to which the cost and/or timing uncertainties are linked to-
  - (a) a certain level of demand or connection of new generation; and/or
  - (b) any other drivers of **E & D base capex**.

### F3      **Overview**

- (1) An overview narrative on how the proposed **base capex projects** and **base capex programmes** are consistent with the-
  - (a) most recent **integrated transmission plan**, and an explanation for any material divergence; and
  - (b) **opex proposal**;
- (2) Overall description of **Transpower's** aims and objectives with respect to **base capex**;

- (3) Summary of the key evidence supporting those aims and objectives;
- (4) Explanation as to the overall deliverability of the proposed **base capex projects** and **base capex programmes**; and
- (5) Identification and explanation of the factors likely to affect the deliverability of the proposed **base capex projects** and **base capex programmes** by **base capex category**.

#### F4 **Governance and consultant reports**

- (1) Schedule listing **Transpower's** governance arrangements (including **policies**, processes, strategies and risk assessments) applicable to **base capex** concerning-
  - (a) **base capex projects** costing more than the **base capex threshold**;
  - (b) **base capex programmes**;
  - (c) asset management;
  - (d) business planning; and
  - (e) capital works;
- (2) Description of all material changes to **policies** and processes that have had a material impact on expenditure levels; and
- (3) Schedule listing all consultant reports commissioned for the purpose of preparing the **base capex proposal**.

#### F5 **Cost and efficiency**

- (1) Evidence demonstrating if, and how, **Transpower** has, in relation to **base capex**, during the current **regulatory period**-
  - (a) pursued, and is pursuing process improvements;
  - (b) ensured and is seeking to ensure appropriate least-whole-of-life cost and efficient interventions;
  - (c) pursued and is pursuing cost reduction strategies for its **projects** and **programmes**;
  - (d) ensured and is seeking to ensure that both internal and external suppliers of goods and services have incentives to perform well and identify cost savings;
- (2) Description of all efficiency assumptions relied upon in the proposed **base capex allowances**; and
- (3) Description of-
  - (a) any contingency included in proposed costs; and
  - (b) the methodology for calculating such contingencies.

F6 **Information on identified programmes**

- (1) Description, in respect of each **identified programme**, of the milestones that have been passed in accordance with **Transpower's** internal approval processes;
- (2) In respect of each **identified programme**-
  - (a) description of the **identified programme**, including its aims and objectives;
  - (b) economic analyses that support it;
  - (c) explanation as to its deliverability, with reference to factors likely to specifically affect the **identified programme**;
  - (d) description of the methodology used to generate the forecast of its **base capex**, including, but not limited to-
    - (i) the relevant key assumptions and how they were applied;
    - (ii) any relevant cost benchmarking undertaken by or for **Transpower**;
    - (iii) internal historical cost trends for specific cost components relied upon e.g. unit costs; and
    - (iv) any models used, accompanied by explanations of the models and how they were relied upon;
  - (e) any material change from historical costs in any cost component included in the **identified programme** and its effect on the forecast **base capex**;
  - (f) list of all relevant **documents** taken into account in forecasting the **identified programme's base capex**, including **documents** relating to the **identified programme's** deliverability, relevant **policies** and consultant reports;
  - (g) explanation of the extent to which the **identified programme's** forecast **base capex** implements the key assumptions, any consultant reports, and **policies** relating to the planning of the **grid** and the forecasting of **capital expenditure** and **operating expenditure** for that purpose, including in relation to-
    - (i) long term **grid** development;
    - (ii) **grid** maintenance; and
    - (iii) **grid** operation;
  - (h) explanation of all material departures from any-
    - (i) relevant **policies**;
    - (ii) planning standards; or
    - (iii) conclusions and recommendations contained in the consultant reports identified pursuant to paragraph (f);

- (i) overview of any significant tradeoffs between **operating expenditure, base capex** and quality that **Transpower** considered in the development of the **identified programme**;
  - (j) assessment of its impact upon either or both of the-
    - (i) quality performance; and
    - (ii) serviceability,of the assets to which the **identified programme** relates;
  - (k) description of relevant legally enforceable duties owed by **Transpower**, whether arising under legislation, at common law or in contract, that have a material impact on the **identified programme**;
  - (l) description of any material step change compared to historic costs for the same or a similar type of **project** or **programme**;
  - (m) explanation of the effect of a step change described pursuant to paragraph (l) on the forecast **base capex** of the **identified programme**.
- (3) In respect of each **identified programme** with a forecast **commissioning date** in the next **regulatory period**-
- (a) description of the reasons for the **identified programme** and the key assumptions underlying the **investment need**;
  - (b) where options have been considered, provide a summary of the options considered, the analyses undertaken and the reasons for selecting the preferred option;
  - (c) summary of expected costs and a description of benefits and outputs; and
  - (d) identify, quantify and justify all contingency sums included in the forecast cost of the **identified programme**.
- (4) In respect of each **identified programme** with a forecast **commissioning date** in the **regulatory period** after the next **regulatory period**-
- (a) describe the milestones that are planned to be completed in the next **regulatory period**; and
  - (b) provide the forecast **commissioning date**.
- (5) In relation to each **identified programme** that may use outsourced services which may have a material effect on the desired outcome of the **identified programme** to the extent known-
- (a) identify the outsourced services;
  - (b) explain whether those outsourced services are to be provided-
    - (i) under a discrete contract; or
    - (ii) as part of a broader operational arrangement or contract or similar;

- (c) provide an overview of the procurement process, including an explanation of the extent to which the process will involve competitive bidding, and if not, why not;
- (d) identify any significant components of any outsourced services that have been, or will be sub-contracted to another supplier; and
- (e) identify relevant procurement **documents** in a schedule, including but not limited to requests for tender and submissions in response.

**F7 Procurement**

- (1) Provide a description of the procurement process that will be used to deliver the proposed expenditure included in the **base capex proposal**; and
- (2) Identify and explain any key risks associated with procurement that has the potential to affect the delivery of **base capex projects** and **base capex programmes** in the next **regulatory period**.

**F8 Resourcing and delivery**

- (1) Description of plans for resourcing and delivering the proposed **base capex projects** and **base capex programmes**;
- (2) Identification of the key risks associated with resourcing and delivering the proposed **base capex projects** and **base capex programmes** including explanation of each risk's potential to affect-
  - (a) the forecast **base capex**; and
  - (b) forecast **grid output measures**; and
- (3) Description of the processes that will be implemented to manage or mitigate the risks to which subclause (2) relates.

**F9 Other capex**

In respect of any **base capex** included in the **regulatory templates** agreed pursuant to clause 2.2.1(1)(a) or specified pursuant to clause 2.2.1(2) that does not relate to an **identified programme**, description of the rationale for any forecast **base capex** exceeding \$1 million in any one **disclosure year**.

**F10 Escalation factors and foreign exchange assumptions**

- (1) In respect of each escalation factor relied on to account for changes in input prices in completing the **regulatory templates** agreed pursuant to clause 2.2.1(1)(a) or specified pursuant to clause 2.2.1(2)-
  - (a) description of each such escalation factor and rationale for its use;

- (b) methodology underlying the calculation of its quantum, by reference to data sources, data conversions and assumptions relied upon, including lags;
  - (c) the weighting given to it and description of how that weighting was determined, including any assumptions relied upon;
  - (d) explanation of whether the same escalation factor has been used in the **base capex proposal** and **opex proposal**, and if not, explanation and supporting evidence as to why different escalator factors were applied;
  - (e) an explanation of whether, in applying escalation factors that relate to labour or material inputs, additional contingency factors were applied and, if so, description of the uncertainties they account for and how they were calculated;
- (2) A list of the foreign exchange rates used to prepare the proposed **base capex allowances**;
- (3) An estimate of the exposure to foreign currency for each foreign currency for each year of the next **regulatory period** and description of how these estimates were produced.

**F11 Information on proposed grid output measures**

- (1) List of all proposed **grid output measures** that-
- (a) must include the following-
    - (i) one or more **asset performance measures**;
    - (ii) one or more **measures of grid performance**; and
    - (iii) one or more **asset health grid output measures**;
  - (b) may include the following-
    - (i) one or more **asset capability grid output measures**; and
    - (ii) any other **grid output measures**;
- (2) Description of each **grid output measure** listed under subclause (1) including-
- (a) detailed definitions;
  - (b) details as to what the **grid output measure** includes and excludes;
  - (c) the reasons for selecting each **grid output measure**, including the relationship with the-
    - (i) risks associated with the **grid**;
    - (ii) forecast performance of the **grid**; and
    - (iii) the purposes of the investment in the **grid** as proposed in the **base capex proposal**.

- (3) In respect of each **grid output measure** listed under subclause (1)-
  - (a) identify whether it is proposed as a **revenue-linked grid output measure**, or not linked to revenue;
  - (b) the effect that the proposed **base capex allowances** would have on the measure during the next **regulatory period** and beyond it;
  - (c) the alignment with the underlying business processes used to plan and operate the **grid**; and
  - (d) all relevant calculations, models and supporting data;
- (4) In respect of each **grid output measure** listed under subclause (1) not linked to revenue-
  - (a) the forecast value of the **grid output measure** at the start and by the end of the **regulatory period**; and
  - (b) an explanation of how the forecast value was determined.

#### F12 **Revenue-linked grid output measures**

- (1) In respect of each proposed **revenue-linked grid output measure**-
  - (a) a description of how it will be linked to revenue through the **grid output mechanism**;
  - (b) in respect of each **disclosure year** of the **regulatory period**, a proposed-
    - (i) **grid output target**;
    - (ii) **grid output incentive rate**;
    - (iii) **cap**; and
    - (iv) **collar**;
  - (c) description of and justification for the proposed **grid output targets, caps, collars, and grid output incentive rates** including-
    - (i) how each was determined by reference to the relevant definitions;
    - (ii) whether, and if so, for each **grid output target, Transpower** has had regard to any consultation responses and relates to relevant **policies** and key assumptions;
  - (d) to the extent possible, historical performance data for the seven most recently completed **disclosure years**;
- (2) Commentary comparing and evaluating the performance of each proposed **revenue-linked grid output measure** with respect to actual **capital expenditure** and **operating expenditure** over the 7 most recently completed **disclosure years**;

- (3) Commentary as to how the proposed **grid output targets** relate to the proposed **base capex allowances** and proposed **operating expenditure** allowance as contained in the **opex proposal**;
- (4) Identification of any key assumptions relied upon and modifications or changes made to historical performance data for the purpose of determining the proposed **grid output targets**; and
- (5) Description of models and all data used to determine the proposed **grid output targets, caps and collars**.

## SCHEDULE FA OPEX PROPOSAL – INFORMATION

### FA1 Qualitative information required in an opex proposal

An **opex proposal** must include all of the information listed or described in this schedule. The information listed or described in this schedule is, unless otherwise stated, required in respect of the **IPP regulatory period**.

### FA2 Company structure and nature of regulated services

Provide a summary of **Transpower's** company structure and its regulated services, including:

- (a) a current group structure map, including all companies and subsidiaries, as well as a high-level description of the main functions of each and their relationship with **Transpower**, and any proposed material changes planned to be made to the group structure for or in the **IPP regulatory period**;
- (b) a current organisation chart, including a description of operating units, the main organisational functions and their relationships, and staff numbers;
- (c) any already-confirmed material changes planned to be made to the organisation structure for or in the **IPP regulatory period** that would alter current **opex** patterns for that period; and
- (d) a description of any proposed material changes to regulated services or outputs provided in the current **regulatory period** and which are planned to be made for or in the **IPP regulatory period**.

### FA3 Current regulatory period opex

Provide the following information concerning **opex** in the current **regulatory period**:

- (a) a description of the key drivers of **opex** in the period;
- (b) the actual and estimated efficiency savings achieved for each **opex category**, including forecast amounts until the end of the period;
- (c) a description and the amount spent on innovation initiatives in the period, including how customers will benefit in the long term from those initiatives; and
- (d) evidence demonstrating, if, and how, **Transpower** has:
  - (i) pursued and is pursuing **opex** process improvements, including those identified in **Transpower's opex proposal** for the current **regulatory period**;
  - (ii) ensured and is seeking to ensure appropriate least-whole-of-life cost and efficient interventions;

- (iii) pursued and is pursuing cost reduction strategies, with relevant examples provided from its **opex categories**; and
- (iv) ensured and is seeking to ensure that both internal and external suppliers of goods and services have incentives to perform well and identify cost savings.

**FA4 IPP regulatory period opex**

Provide the following forecast **opex** information in the **opex proposal**:

- (a) a description of **Transpower's** objectives for its **opex** and representative examples from its **opex categories** that demonstrate the ways in which the **opex proposal** is consistent with an expenditure outcome which represents the efficient costs of a prudent supplier, having regard to **good electricity industry practice** as the appropriate planning and performance standard for a prudent supplier;
- (b) an explanation of any material variances between the **opex proposal** and the **integrated transmission plan**;
- (c) the source documents substantiating, or relied upon to prepare, the explanations at paragraph (b);
- (d) an overview that gives context to, and explains:
  - (i) linkages between **Transpower's** historical **opex**, quality performance and **capex**, and **Transpower's** forecast **opex**, proposed quality standards and **grid outputs** and **capex** for the **IPP regulatory period**, including an explanation of how the **capex** programme during the 2 **regulatory periods** preceding the **IPP regulatory period** has impacted on the forecast **opex** for that period; and
  - (ii) any factors driving a material change in levels of **opex** for each of the **opex categories** forecast for the current **regulatory period** and those forecast for the **IPP regulatory period**;
- (e) an overview of the methods used to develop the **opex** forecast for each **opex category** and for **opex** in aggregate, which must include:
  - (i) details of the forecasting approach used for each **opex category**, e.g., bottom up, base-step-trend, benchmarking analysis;
  - (ii) an explanation of why the forecasting approach used is considered appropriate;
  - (iii) when a base-step-trend forecasting approach is used, an explanation on why the expenditure in the selected historic base year is representative of recurring expenditure, including information on non-recurring expenditure that has been removed from the base year expenditure;

- (iv) when a base-step-trend forecasting approach is used, an explanation on how any included forecast step changes and trend assumptions reflect efficient costs;
  - (v) details of how the effects of uncertainties are incorporated in forecasts;
  - (vi) details of how synergies between **opex** portfolios and between **opex** and **capex** are taken into account;
  - (vii) details of the challenge and approval process employed for sign-off of **opex** forecasts; and
  - (viii) details of the differences, if any, and improvements in the forecasting approach used to develop forecasts compared to that used for the **opex proposal** for the current **regulatory period**.
- (f) a description of **Transpower's** approach to treating forecast efficiencies in its **opex proposal**;
  - (g) a description and quantification of any contingency amounts that are included in the **opex proposal**, the methodology for calculating those contingency amounts, and how the contingency amounts apply to specific **identified programmes**, where relevant;
  - (h) an explanation of the deliverability of proposed levels of **opex** for each **opex category**, as well as any factors likely to affect this, including:
    - (i) a description of plans for resourcing and delivering proposed levels of **opex** for each **opex category**;
    - (ii) identification of key risks associated with resourcing and delivering proposed levels of **opex** for each **opex category**, including explanation of each risk's potential to affect-
      - (A) forecast levels of **opex**;
      - (B) forecast **grid outputs**; and
    - (iii) a description of the **policies** that will be implemented to manage or mitigate these key risks;
  - (i) a description of the rationale for forecast expenditure of each **opex category** that is not an **identified programme**; and
  - (j) an operational copy of the model used to generate the forecast **opex** for each of the **opex categories** in all **disclosure years** in the **IPP regulatory period** required for the **opex proposal**.

FA5 **Identified programmes – opex**

Provide the following information for each **identified programme** in the **opex proposal**:

- (a) a description of the **identified programmes**, including its aims, objectives and benefits;
- (b) an explanation as to deliverability, including factors likely to specifically affect that **identified programme**;
- (c) a description of the methodology used to generate the forecast of the **opex** for that **identified programme**, including-
  - (i) key assumptions and how they were applied;
  - (ii) any relevant cost benchmarking undertaken by or for **Transpower**;
  - (iii) any information available on internal historical cost trends for specific cost components relied upon, e.g., unit costs;
- (d) a list of all key **documents** taken into account in forecasting **opex** for that **identified programme**, including key **documents** relating to deliverability, **policies** and consultants' reports;
- (e) an explanation of the extent to which forecast **opex** for that **identified programme** implements the key assumptions, recommendations from any consultants' reports, and **policies** relating to the planning of the **grid**, and the forecasting of **capex** and **opex** for that purpose, including in relation to:
  - (i) long term **grid** development;
  - (ii) **grid** maintenance; and
  - (iii) **grid** operations;
- (f) where relevant, an explanation of the extent to which forecast non-network **opex** for that **identified programme** implements the key assumptions, recommendations from relevant consultants' reports, and **policies** relating to the other aims and objectives of **Transpower**;
- (g) an explanation of all material departures from any:
  - (i) relevant **policies**;
  - (ii) planning standards; or
  - (iii) conclusions and substantive recommendations contained in consultants' reports;
- (h) an assessment of any significant trade-offs between **opex**, **base capex**, **major capex** and quality that **Transpower** considered in the development of the **identified programme**;
- (i) a description of relevant regulatory obligations that have a material effect on the **identified programme**;
- (j) an explanation of any material step change from historical costs in any cost component for the same or a similar type of **programme**, and an explanation

of the effect of the step change on forecast **opex** for the **identified programme**;

- (k) a schedule of key models used, accompanied by explanations of the models and how they were relied upon for the **identified programme**;
- (l) a description of the procurement processes that **Transpower** will use to help deliver the **identified programme**; and
- (m) an explanation of any key risks associated with procurement with the potential to affect the delivery of the **identified programme**.

**FA6 Policies, processes and consultants' reports**

Provide the following information in relation to **policies** and processes and consultants' reports:

- (a) a schedule listing and describing key **policies** and processes applicable to:
  - (i) **opex** portfolios;
  - (ii) asset management, including ensuring lowest lifecycle costs for assets;
  - (iii) business planning;
  - (iv) insurance (including self-insurance);
  - (v) procurement related to **opex**;
  - (vi) monitoring and reporting on forecast versus actual performance (including efficiency gains) achieved for **opex categories**;
  - (vii) programs and initiatives that have been the subject of **Transpower's** internal approval system;
  - (viii) capital works, including the demarcation between **capex** and **opex**, the trade-off between capex and opex and the decision processes for investing in **capex** or **opex**; and
  - (ix) any other **policies** that materially shape the **opex proposal**;
- (b) a description and estimated quantified impact on the **opex proposal** of any material changes to key **policies** and processes applicable to **opex** that **Transpower** has made since it submitted the **IPP proposal** for the current **regulatory period**;
- (c) a schedule of consultant engagements where **Transpower** has sought specialist industry opinion as part of the **opex proposal**, that indicates, in each case, the topic on which the consultant was engaged and the scope of their engagement.

**FA7 Escalation factors and foreign exchange assumptions**

- (1) Provide the following information in respect of each escalation factor relied on to account for changes in input prices used in the **opex proposal**:

- (a) a description of each escalation factor and the rationale for its use;
  - (b) the methodology underlying the calculation of the escalation factor's quantum, by reference to inputs and assumptions;
  - (c) the weighting given to the escalation factor and description of how that weighting was determined, including any assumptions relied upon; and
  - (d) for escalation factors that relate to labour or material inputs, an explanation of whether additional contingency factors were applied and, if so, a description of the uncertainties that the contingency factors account for and how the contingency factors were calculated.
- (2) In respect of the foreign exchange assumptions used in the **opex proposal**, provide the following information:
- (a) a list of the foreign exchange rates, and the source of those rates, used to prepare the **opex proposal**; and
  - (b) an estimate of the forecast exposure to foreign exchange movements for each foreign currency for each year of the **IPP regulatory period** and a description of how these estimates were produced.

**FA8 Instantaneous reserve event charges**

Provide an estimate of instantaneous reserve event charges for each year of the **IPP regulatory period**, and a description of the methodology used to develop the estimates.

**FA9 Insurance**

Provide the following information in relation to any proposed self-insurance allowance:

- (a) a description of the method used to forecast insurance costs;
- (b) a description of the methodology used to calculate the self-insurance risk premium for any material new insured risks (ie, step changes in the proposed self-insurance allowance attributable to increases in the scope of insured risk); and
- (c) a report from an actuary, who is qualified to provide such advice, on-
  - (i) the reasonableness of any 'step' in the self-insurance base-step-trend calculation attributable to changes in market trends in insurance premiums; and
  - (ii) the methodology used to quantify the effect of any material new insured risks.

**FA10 Cost allocation**

Provide the following information in relation to the allocation of Transpower's costs:

- (a) relevant policy documents that describe the cost allocation methodology, consistent with causes 2.1.1 and 3.2.1 of the Transpower Input Methodologies Determination 2010, used by **Transpower** for allocating **opex** between **electricity transmission services**, other regulated services and unregulated services;
- (b) a description of how that cost allocation methodology is used for allocating **opex** between the services that are planned to be undertaken in the **IPP regulatory period**;
- (c) a description of all material changes from the cost allocation methodology used for the current **regulatory period** and the methodology used in the **opex** forecasts for the **IPP regulatory period**, and the reasons for those changes; and
- (d) the impact, if any, between the **opex** values that would have been allocated for the **IPP regulatory period** using the methodology used in the **opex proposal** for the current **regulatory period** and the **opex** values allocated in the **opex** forecasts for the **IPP regulatory period**.

## SCHEDULE G MAJOR CAPEX PROPOSALS

### G1 Information required in a major capex proposal

For the purpose of clause 7.4.1(1)(a)-

- (a) a **major capex proposal** must include the information listed or described in this schedule; and
- (b) where the **major capex proposal** relates to the continuation of an existing **major capex project (staged)**, the information may be provided as updates to the information previously supplied for the **major capex project (staged)** and previously approved **staging projects**.

### G2 Information on the investment need

Explanation of the **investment need**, including-

- (a) information on its nature, extent, location and timing;
- (b) commentary as to how the **investment need** is consistent with the most recent **integrated transmission plan**; and
- (c) a summary of consultation participants' views on the **investment need** and how **Transpower** had regard to those views and if not, why not.

### G3 Information on relevant demand and generation scenarios and counterfactual case

- (1) Detailed description of each **demand and generation scenario variation**, including-
  - (a) an explanation of the major variations between the **demand and generation scenario variation** and the related original **demand and generation scenario**;
  - (b) the rationale for the variations; and
  - (c) a summary of consultation participants' views on them;
- (2) In respect of each **relevant demand and generation scenario**-
  - (a) the relative weighting of each scenario; and
  - (b) where that weighting was determined by **Transpower**, the methodology used to determine it; and
- (3) A detailed description of the **counterfactual case**, including-
  - (a) an explanation of the major assumptions underlying the **counterfactual case**;

- (b) the rationale for the assumptions; and
- (c) a summary of consultation participants' views on the option.

**G4 Information relating to each investment option**

In relation to each **investment option** contained in the **major capex proposal**-

- (1) description of the **investment option**;
- (2) **net electricity market benefit** of each **investment option** under each **relevant demand and generation scenario**;
- (3) in respect of each **investment option**, quantum of-
  - (a) each **electricity market benefit or cost element**;
  - (b) each **project cost**;
  - (c) aggregate **electricity market benefit or cost element**; and
  - (d) the **P50**,used to calculate each **net electricity market benefit**;
- (4) methodology used to determine the quantum of all information provided pursuant to subclause (3), including details commensurate with the estimated **capital expenditure** and **consequential opex**, and with the complexity of the **investment option**, of any-
  - (a) internal and external benchmarking and how the results were applied;
  - (b) relevant existing or proposed supply or procurement processes;
  - (c) modelling tools or techniques; and
  - (d) key publications and data sources;
- (5) key assumptions used to determine the **net electricity market benefit** of each **investment option**, including-
  - (a) **discount rate**;
  - (b) **calculation period**; and
  - (c) cost per megawatt hour used to determine the **value of expected unserved energy**; and
- (6) **expected net market benefit** of each **investment option**.

**G5 Information relating to proposed investment only**

- (1) Identification of the **proposed investment** and, where the **proposed investment** is a **major capex project (staged)**, provide-

- (a) a description of all the proposed **staging projects** of the **major capex project (staged)**;
  - (b) full details of each **staging project** for which approval is being sought;
  - (c) reasons for the proposed staging, including the extent to which splitting the **major capex project (staged)** into stages has the potential to reduce the timing, scope or cost uncertainties of the **major capex project**; and
  - (d) the estimated **project costs**, proposed **major capex project outputs** and planned timing of each **staging project** for which approval is being sought;
- (2) Detailed description of the components of the **major capex project** or **staging projects** , including at least-
- (a) identification of the extent to which the **major capex project** or each **staging project** includes a **transmission investment** or a **non-transmission solution**;
  - (b) a summary of requirements for completion of the **major capex project** or each **staging project**, such as property or property right acquisition, resource management approvals, asset purchases, asset construction and site remediation;
  - (c) any proposed **major capex allowance** for the **major capex project** or each **staging project**, which must be the **P50**, of **capital expenditure** and the estimated probability distribution of the **P50**;
  - (d) where a **major capex allowance** is applicable, the **commissioning date assumption** and rationale for it;
  - (e) any proposed **maximum recoverable costs**;
  - (f) where **maximum recoverable costs** are applicable, the **completion date assumption** and rationale for it;
  - (g) the **major capex incentive rate** where a different rate to the default rate of 15% is proposed and the rationale for it;
  - (ga) the **P30** and **P70** for the **project**;
  - (h) all relevant supporting technical information and costing information;
  - (i) where the **major capex project** or a **staging project** includes a **non-transmission solution**-
    - (i) the proposed **recovery scheme**; and
    - (ii) an explanation of the relationship between any proposed **major capex allowance** and any proposed **maximum recoverable costs** for that **non-transmission solution**; and
  - (j) proposed **approval expiry date** and rationale for it;
- (3) Detailed description of the rationale for the **proposed investment**;

- (4) Detailed information of the rationale for any **consequential opex**, including information on any **consequential opex** that is expected to be ongoing;
- (5) Summary of the key evidence that supports the rationales such as contracts, reports, memos, financial or other data, results of modelling exercises, customer documentation and letters, and statements from **directors**;
- (6) Commentary as to how consistent the **proposed investment** is with the most recent **integrated transmission plan**, and if not, why not;
- (7) Identification of anything associated with the **proposed investment** falling under any of clauses D4(1)(a) to D4(1)(g) that did not meet the definition of **electricity market benefit or cost element** only by virtue of its being unlikely to affect the **net electricity market benefit** to an appreciable degree;
- (8) Description of considerations, assumptions and calculations used to determine that something falling under any of clauses D4(1)(a) to D4(1)(g) did not meet the definition of **electricity market benefit or cost element** by virtue of its being unlikely to affect the **net electricity market benefit** to an appreciable degree;
- (9) Outcome of **sensitivity analysis**;
- (10) Description of the methodology applied in undertaking **sensitivity analysis**;
- (11) Explanation as to how robust to **sensitivity analysis** the **proposed investment** is;
- (12) Reasons for any selection of a-
  - (a) **discount rate** other than 5%; and
  - (b) **calculation period** other than 20 years;
  - (c) cost per megawatt hour determined using paragraph (b) of the definition of **value of expected unserved energy**;
- (13) A description as to how consistent with **good electricity industry practice** the **proposed investment** is;
- (14) Rationale for determining that the **proposed investment** may satisfy the **investment test** by reference to each subclause and paragraph of that test; and
- (15) A plan for monitoring costs, **project** milestones and deliverables that reflects the best information available to **Transpower**.

## G6 **Grid outputs**

In relation to the **major capex project** or, each **staging project** for which **Transpower** seeks approval-

- (1) **the major capex project outputs** that are proposed;
- (2) the quantum of each proposed **major capex project output**;

- (3) the rationale for the proposed **major capex project outputs**, including-
  - (a) description of key factors and key assumptions relevant to their determination including the uncertainty associated with each such factor or assumption; and
  - (b) explanation of the extent to which the quantum of each proposed **major capex project output** reflects:
    - (i) the assets to be **commissioned**;
    - (ii) the forecast changes to the functional capability of the **grid**;
    - (iii) the quantum of forecast **electricity market benefit or cost elements** directly related to the **supply of electricity transmission services**; and
    - (iv) in respect of a **non-transmission solution**, any service provided by a third party;
- (4) explanation of the relationship between the proposed **major capex allowance** and the quantum of each **major capex project output** that is proposed including the sensitivity of the quantum of each **major capex project output** that is proposed to changes in the proposed **major capex allowance**, including commentary in terms of increases or decrease in the scope of the **project**;
- (5) description of factors that may affect **Transpower's** ability to achieve each **major capex project output** that is proposed, including identification of each factor, with reasons, as within or outside **Transpower's** control; and
- (6) in the case of a **non-transmission solution**, a description of the **transmission investment** it avoids in terms of both assets and expected costs avoided.

#### G7 **Information on consultation**

In respect of consultation, the specified information is a description as to how the consultation programme referred to in clause 3.3.1(9) was followed, including-

- (a) a list of the relevant consultation steps and confirmation by **Transpower** that each occurred;
- (b) a list of respondents to the consultation;
- (c) a description of all issues raised by interested persons in response to **Transpower's** intended **major capex proposal**;
- (d) a summary of the arguments raised in respect of each issue to which paragraph (c) applies; and
- (e) an explanation of how the arguments referred to in paragraph (d) were taken into account when determining the **investment options** and applying the **investment test**.

**G8 Information on non-transmission solutions**

In respect of **non-transmission solutions**, a description as to how the requirements of Schedule I Division 2 were met, including-

- (a) summary of the process followed to identify and assess **non-transmission solutions**;
- (b) description of **non-transmission solutions** suitable to meet the relevant **investment need** identified either by **Transpower** or by consultation participants;
- (c) explanation as to how the **non-transmission solutions** to which paragraph (b) applies were taken into account when determining the **investment options** and applying the **investment test**; and
- (d) description and justification of how any assets that would be **commissioned** by **Transpower** form part of the **non-transmission solution**.

**G9 Additional information**

Any additional supporting material **Transpower** reasonably considers is relevant to the decision of the **Commission** under clause 3.3.5.

# SCHEDULE H INFORMATION REQUIREMENTS FOR AMENDMENT AND SUNK COSTS APPLICATIONS FOR MAJOR CAPEX PROJECTS

## DIVISION 1 AMENDMENTS TO MAXIMUM RECOVERABLE COSTS OR RECOVERY SCHEME

### H1 Information to be provided

For the purpose of clause 7.4.2(3)(a), the amendment application must include the information listed or described in this division.

### H2 Project identification and specifications

Identification of-

- (a) the relevant **non-transmission solution**;
- (b) its **maximum recoverable costs**; and
- (c) its **major capex allowance**, if any.

### H3 Amendments sought

- (1) Quantum of any proposed amendment to **maximum recoverable costs**;
- (2) Calculations showing how the quantum of the proposed amendment was calculated;
- (3) Assumptions made in making those calculations;
- (4) Evidence in support of the calculations, including, where relevant-
  - (a) correspondence from manufacturers, suppliers, contractors and other relevant parties; and
  - (b) equipment test results;
- (5) An explanation of the relationship between the proposed **maximum recoverable costs** and any **major capex allowance** for that **non-transmission solution**; and
- (6) Description of any amendment proposed to the **recovery scheme**.

### H4 Progress of project

Description of progress made on the **non-transmission solution**, including details of-

- (a) planning processes undertaken;

- (b) resource management consents, other regulatory consents, and property rights and access rights obtained;
- (c) any request for information or request for services issued to third parties;
- (d) construction and labour contracts and arrangements made with providers of **non-transmission solutions**;
- (e) construction completed;
- (f) testing undertaken; and
- (g) the proportion (measured by reference to costs incurred by **Transpower**) of the **non-transmission solution**-
  - (i) already provided; and
  - (ii) remaining to be provided.

H5 **Current and forecast expenditure**

- (1) **Operating expenditure** incurred, in aggregate;
- (2) **Operating expenditure** incremental to the **operating expenditure** allowance specified in the **IPP determination** proposed to be classified as a **recoverable cost** (in aggregate and broken down by type);
- (3) Capital costs incurred proposed to be classified as **recoverable costs** (in aggregate and broken down by type);
- (4) Total expenditure incurred proposed to be classified as a **recoverable cost**;
- (5) Forecast remaining expenditure proposed to be classified as a **recoverable cost**;
- (6) Difference between the proposed amendment to **maximum recoverable costs** and **maximum recoverable costs**.

H6 **Reasons for making the application**

- (1) Reason for applying, including-
  - (a) description of key factors leading to the application;
  - (b) explanation as to the extent to which each key factor is within **Transpower's** control; and
  - (c) explanation as to the extent to which each key factor was reasonably foreseeable by **Transpower** before the relevant **major capex proposal** was approved;
- (2) Description of the implications of the proposed amendment on the relevant **approved major capex project outputs**;

- (3) Where an application for amendment to the **approved major capex project outputs** is being made concurrently, explanation as to how the proposed amendments relate to each other in light of the information to which subclause (2) applies;
- (4) Where no application for amendment to the **approved major capex project outputs** is being made concurrently, explanation as to why those **approved major capex project outputs** will remain appropriate were the proposed adjustment made in light of the information to which subclause (2) applies;
- (5) Statement as to whether the **expected net electricity market benefit** of the **non-transmission solution** is materially lower at the time of the application than when the relevant **major capex proposal** was approved and if so, current quantum of its **expected net electricity market benefit**; and
- (6) Explanation as to why making the proposed amendment would promote the long-term benefit of **consumers**, taking into account-
  - (a) any costs that are sunk;
  - (b) the context in which the **major capex proposal** was made; and
  - (c) the context in which any subsequent amendments to the approval were made by the **Commission**.

## DIVISION 2 **AMENDMENT TO APPROVED MAJOR CAPEX PROJECT OUTPUTS**

### H7 **Information to be provided**

For the purpose of clause 7.4.2(3)(b), the amendment application must include the information listed or described in this division.

### H8 **Project identification and specifications**

Identification of relevant **approved major capex project** and its **approved major capex project outputs**;

### H9 **Amendment sought**

- (1) Proposed amendments to the **approved major capex project outputs**;
- (2) Explanation as to how each proposed amendment was arrived at; and
- (3) Description of the extent to which each proposed amendment reflects a change to the-
  - (a) assets to be **commissioned**;
  - (b) functional capability of the **grid**;

- (c) quantum of **electricity market benefit or cost elements** directly related to the **supply of electricity transmission services** that are likely to be achieved as a result of undertaking the **project**; and
- (d) in the case of a **non-transmission solution**, description of the extent to which each proposed amendment reflects a change to any relevant service provided by a third party;

#### H10 **Progress of project**

Description of progress made on the **approved major capex project**, including as applicable details of-

- (a) planning processes undertaken;
- (b) resource management consents, other regulatory consents, and property rights and access rights obtained;
- (c) construction and labour contracts and arrangements made;
- (d) construction completed; and
- (e) testing undertaken;

#### H11 **Current and forecast expenditure**

- (1) In the case of a **transmission investment**:
  - (a) **major capex** incurred; and
  - (b) forecast remaining **major capex**;
- (2) In the case of a **non-transmission solution**:
  - (a) total costs incurred proposed to be classified as **recoverable costs**;
  - (b) total costs incurred in relation to assets to be **commissioned** in relation to the **non-transmission solution**;
  - (c) forecast remaining costs proposed to be classified as **recoverable costs**; and
  - (d) forecast remaining costs incurred in relation to assets to be **commissioned** in relation to the **non-transmission solution**.

#### H12 **Reasons for making the application**

- (1) Reason for applying, including-
  - (a) description of key factors leading to the application;
  - (b) commentary on the extent to which each key factor is within **Transpower's** control and actions taken to mitigate it; and

- (c) commentary on the extent to which each key factor was reasonably foreseeable by **Transpower** before approval of the relevant **approved major capex project**;
- (2) Description and, where relevant, quantum of any current key assumptions different to those relied upon in applying the **investment test** in the **major capex proposal**;
- (3) Description of the outcome of applying the **investment test** as it was applied in the **major capex proposal** modified by the proposed amendments and key assumptions described in subclause (2)(2), including all relevant calculations and justifications for any exercises of judgment;
- (4) Explanation as to why making the proposed amendment would promote the long-term benefit of **consumers** taking account of-
  - (a) the outcome referred to in subclause (3);
  - (b) any costs that are sunk;
  - (c) the context in which the **major capex proposal** was made; and
  - (d) the context in which any subsequent amendments to the approval were made by the **Commission**;
- (5) Where no application for amendment to the **maximum recoverable costs**, is being made concurrently, an explanation as to why those costs will remain appropriate were the proposed amendment to **approved major capex project outputs** made; and
- (6) An explanation as to the appropriate **major capex allowance** if the proposed amendment to the **approved major capex project outputs** were made.

### DIVISION 3 **AMENDMENT TO APPROVAL EXPIRY DATE**

#### H13 **Information to be provided**

For the purpose of clause 7.4.2(3)(c), the amendment application must include the information listed or described in this division.

#### H14 **Project identification and specifications**

Identification of relevant **approved major capex project** and-

- (a) its **approval expiry date**; and
- (b) its **major capex allowance** or **maximum recoverable costs**;

#### H15 **Amendment sought**

Proposed new **approval expiry date**;

#### H16 Progress of project

- (1) Where a **major capex allowance** is applicable, the **commissioning date assumption**;
- (2) Where **maximum recoverable costs** are applicable, the **completion date assumption**; and
- (3) Description of progress made on the **approved major capex project**, including details of-
  - (a) planning processes undertaken;
  - (b) details of resource management consents, other regulatory consents, and property rights and access rights obtained;
  - (c) details of resource management consents, other regulatory consents, and property rights and access rights still in progress;
  - (d) details of other consent, property or access negotiations in progress;
  - (e) any request for information or request for services issued to third parties;
  - (f) construction and labour contracts and arrangements made;
  - (g) construction completed; and
  - (h) testing undertaken;

#### H17 Current and forecast expenditure

- (1) **Major capex** incurred;
- (2) Forecast remaining **major capex**; and
- (3) Amount of any **major capex** in the forecast remaining **major capex** in excess of the **major capex allowance** or **maximum recoverable costs**, as the case may be.

#### H18 Reasons for making the application

- (1) Reason for making the application, including-
  - (a) a description of the key factors leading to the application;
  - (b) commentary on the extent to which each key factor is within **Transpower's** control; and
  - (c) commentary on the extent to which each key factor was reasonably foreseeable by **Transpower** before the approval of the relevant **approved major capex project**;

- (2) Description of the likely implications of the amendment, including the effect over the **calculation period** on other **approved major capex projects** where, in the case of an **approved major capex project** that is a-
  - (a) **transmission investment**, the last asset to be delivered by the **project** has not yet been **commissioned**; or
  - (b) **non-transmission solution**, has not yet achieved **completion**.
- (3) Statement as to whether the **expected net electricity market benefit** of the **approved major capex project** is materially lower at the time of the amendment application than when the relevant **approved major capex project** was approved and if so, current quantum of its **expected net electricity market benefit**; and
- (4) Explanation as to why making the proposed amendment would promote the long-term benefit of **consumers**, taking into account:
  - (a) any costs that are sunk;
  - (b) the context in which the **major capex proposal** was made; and
  - (c) the context in which any subsequent amendments to the approval were made by the **Commission**.

#### DIVISION 4 **SUNK COSTS APPLICATIONS**

**H19 Information to be provided**

For the purpose of clause 7.4.3(1), the application for the **major capex sunk costs adjustment** must include the information listed or described in this division.

**H20 Project identification and specifications**

Identification of relevant **approved major capex project**;

**H21 Sunk costs approvals sought**

Quantum of **major capex** that is sought to be recovered as sunk costs;

**H22 Current and forecast expenditure**

Information on current and forecast expenditure, including-

- (a) **major capex** incurred;
- (b) forecast remaining **major capex** to be incurred;
- (c) calculations showing how the amount in clause H21 was calculated;
- (d) assumptions made in calculating the amount in clause H21; and

- (e) evidence in support of the **major capex** incurred, forecast remaining **major capital expenditure** and the amount in clause H21, including, where applicable, **documents** and correspondence from manufacturers, suppliers, contractors and other relevant parties.

### H23 **Progress of project**

Description of progress made on the **approved major capex project**, including details of-

- (a) planning processes undertaken;
- (b) resource management consents, other regulatory consents, and property rights and access rights obtained;
- (c) construction and labour contracts and arrangements made;
- (d) construction completed;
- (e) testing undertaken; and
- (f) **approved major capex project outputs** delivered.

### H24 **Reasons for making the application**

- (1) Reason for applying, including-
  - (a) description of key factors leading to the application, including the date of **Transpower** became aware of each of them;
  - (b) commentary on the extent to which each key factor was within **Transpower's** control and actions taken to mitigate its adverse effects; and
  - (c) commentary on the extent to which each key factor was reasonably foreseeable by **Transpower** before approval of the relevant **approved major capex project**; and
- (2) Explanation as to why making the **major capex sunk costs adjustment** would promote the long-term benefit of **consumers**;

# SCHEDULE I MAJOR CAPEX CONSULTATION REQUIREMENTS

## DIVISION 1 CONSULTATION ON OPTIONS

### 11 What Transpower must consult on

- (1) **Transpower** must consult on-
  - (a) its **investment need**;
  - (b) each **demand and generation scenario variation**;
  - (c) key assumptions;
  - (d) a long list of options to meet each **investment need**; and
  - (e) a short list of **investment options** to meet each **investment need**.
- (2) When consulting on the matters referred to in subclause (1)(e) that consultation must occur after any consultation on the matters referred to in the other paragraphs of that subclause has taken place.
- (3) For the avoidance of doubt, the matters referred to in subclauses (1)(a) to (1)(d) may be consulted upon together or separately.
- (4) This schedule does not apply to any matter in respect of which the **Commission** is satisfied that it is reasonable to exclude the matter from consultation in accordance with clause 8.1.3(2)(b).

### 12 Long list consultation requirements

- (1) Options that must be contained on the long list for consultation purposes must be solutions for meeting the **investment need**.
- (2) When consulting on a long list of options, in its consultation **document**, **Transpower** must-
  - (a) provide a description of the relevant **investment need** that includes appropriate references to other **documents** referring to that need or a similar need, such as the most recent **integrated transmission plan** and any prior consultation **document** on the **investment need**;
  - (b) provide information on the key assumptions and **relevant demand and generation scenarios** it is developing for the purpose of applying the **investment test**;
  - (c) specify any non-standard values or amounts, as the case may be, of the **calculation period** or **value of expected unserved energy** that it may use for the purpose of the **investment test**;

- (d) specify any non-standard **discount rate** that it may use for the purpose of the **investment test**; and
- (e) in respect of each option-
  - (i) specify whether it is a **transmission investment** or **non-transmission solution**;
  - (ii) where it is a **non-transmission solution**, describe its type, where possible by reference to the things listed in the definition of **non-transmission solution**;
  - (iii) describe its features, by reference to at least type, location, and anticipated duration of the works required;
  - (iv) identify if the option may be staged and if so, describe its potential stages; and
  - (v) consult on the proposed staging of the options identified in subclause (iv).

### 13 Short list consultation requirements

- (1) When consulting on a short list of **investment options**, in its consultation **document**, **Transpower** must-
  - (a) describe the **relevant demand and generation scenarios** it intends using for the purpose of the **investment test** and the weightings of those scenarios; and
  - (b) provide information on the relevant key assumptions, including-
    - (i) **value of expected unserved energy** used to calculate the cost of involuntary demand curtailment borne by end users of electricity;
    - (ii) the **counterfactual case**; and
    - (iii) any other variables material to application of the **investment test**.
- (2) In respect of each **investment option** on its short list, **Transpower** must, as a minimum-
  - (a) describe its features by reference to-
    - (i) the definition of **investment option**; and
    - (ii) at least its type, location, and anticipated duration of the works required.
  - (b) address any submissions raised in respect of each option described during the previous consultation;
  - (c) describe the likely **electricity market benefit or cost elements** and **project costs**;

- (d) specify which **electricity market benefit or cost elements** are treated as unquantified;
  - (e) specify an estimate of the quantum of each likely **electricity market benefit or cost element** and **project cost** that is quantified; and
  - (f) specify the methodology or methodologies used to quantify **electricity market benefit or cost elements** and **project costs**;
- (3) In respect of the **investment options** on its short list, **Transpower** must-
- (a) demonstrate that they are appropriate in number and technology with respect to the **investment need** in question;
  - (b) describe the outcome of a preliminary application of the **investment test** based on the information required to be provided by subclauses (1) and (2);
  - (c) where the option **Transpower** considers satisfies the **investment test** is not the option with the highest **expected net electricity market benefit**, explain with reasons how the option satisfying the **investment test** was selected; and
  - (d) in respect of its application of the **investment test**-
    - (i) describe the nature and application of the qualitative assessment used to take into account the contribution of any unquantified **electricity market benefit or cost elements**;
    - (ii) explain the approach taken to **sensitivity analysis**; and
    - (iii) specify any non-standard values or amounts, as the case may be, of the **calculation period**, **discount rate** or **value of expected unserved energy** used, and why those non-standard values or amounts are appropriate.

#### 14 **Key assumptions**

For the purpose of clause 13, the key assumptions consulted upon must include the following things:

- (a) nature of the qualitative assessment used to take into account the contribution of associated unquantified **electricity market benefit or cost elements**;
- (b) **value of expected unserved energy** used to calculate the cost of involuntary demand curtailment borne by end users of electricity;
- (c) **discount rate** used; and
- (d) **calculation period** used.

## DIVISION 2 NON-TRANSMISSION SOLUTIONS

### 15 Approach to consideration of non-transmission solutions to meet investment need

- (1) The approach to enabling consideration of whether one or more **non-transmission solution** may meet an **investment need** must take into account-
  - (a) the size and nature of the **investment need**; and
  - (b) the likelihood that one or more **non-transmission solutions** could reasonably meet it.
- (2) The approach must enable the-
  - (a) reasonable information needs of interested persons, including potential proponents of **non-transmission solutions** to be met; and
  - (b) views of interested persons, including potential proponents of **non-transmission solutions** to be expressed and taken into account.
- (3) As a minimum, the approach must include the requirements that-
  - (a) when consulting on an **investment need**, **Transpower** must-
    - (i) invite interested persons to provide views or information relevant to possible **non-transmission solutions** to meet that need; and
    - (ii) provide sufficient information to enable interested persons, including potential proponents of **non-transmission solutions** to propose **non-transmission solutions**; and
  - (b) **Transpower** need not seek proposals for **non-transmission solutions** from interested persons prior to the initial consultations on its long list of **investment options**, but must take those views and information on or relevant to possible **non-transmission solutions** into account to the extent they have been provided prior to or during the period in which the long list is developed, including pro-actively engaging with the parties providing them, where appropriate; and
  - (c) when consulting on its long list of **investment options**, **Transpower** must -
    - (i) include potential **non-transmission solutions** in its list of **investment options**; and
    - (ii) invite interested potential proponents of **non-transmission solutions** to provide information or proposals on **non-transmission solutions**; and
  - (d) when developing the short list of **investment options** that includes a **non-transmission solution**, **Transpower** must invite proponents of **non-transmission solutions** to provide comprehensive proposals in respect of their **non-transmission solution(s)**.

- (4) The invitations described in subclauses (3)(c) and (3)(d) must grant interested persons and proponents of **non-transmission solutions** 6 weeks to respond, subject to subclause (5).
- (5) For the purpose of subclause (4), the approach may specify a longer or shorter period where appropriate in light of the factors specified in subclause (1).

## DIVISION 2A AMENDMENT OF MAJOR CAPEX PROPOSAL

### I5A Approach to consulting on amendment of major capex proposal

- (1) The consultation requirements for an amendment of a **major capex proposal** are consultation on the following matters:
  - (a) updates on the **investment need**;
  - (b) updates to **major capex project outputs**;
  - (c) updated **relevant demand and generation scenarios**;
  - (d) updates to key assumptions;
  - (e) the **investment test**, if there is a material difference in the assessment of **expected net electricity market benefit** under the **investment test** between the **major capex proposal** as submitted and the **major capex proposal** as amended.
- (2) The extent of consultation by **Transpower** for the purposes of subclause (1) must:
  - (a) be commensurate with the materiality of changes identified in subclause (1); and
  - (b) contain sufficient information to enable interested and affected parties to engage on the amendment to the **major capex proposal** and on the **major capex proposal** as amended.

## DIVISION 3 MAJOR CAPEX PROJECT (STAGED)

### I6 Approach to consulting on major capex project (staged)

- (1) The consultation requirements for the commencement of a **major capex project (staged)** are as set out in clauses I1 to I5.
- (2) The consultation requirements for all subsequent unapproved **staging projects** of the **major capex project (staged)** are, in relation to all such **staging projects** consultation on the following matters:
  - (a) updates on the **investment need**;
  - (b) updated **relevant demand and generation scenarios**;
  - (c) updates of key assumptions;

- (d) update of options to meet each **investment need**;
  - (e) invitation for proposals on **non-transmission solutions**; and
  - (f) the **investment test** if there is material difference between the method or parameters of the **investment test** between previous approved **staging projects** and subsequent **staging projects** of the **major capex project (staged)**.
- (3) The extent of consultation by **Transpower** for the purposes of subclause (2) shall be commensurate with the materiality of changes identified in subclause (2) but shall contain sufficient information to enable interested and affected parties to engage on all unapproved **staging projects** of the **major capex project (staged)**.

## SCHEDULE J      **ENGAGEMENT OF A VERIFIER**

### J1      **Proposing a verifier**

For the purposes of clause 7.6.1, **Transpower** must, before submitting an **IPP proposal**, propose a person to act as a **verifier** for the **IPP proposal** and provide to the **Commission**-

- (a) the information specified in clauses J2 and J3 in respect of the proposed **verifier**; and
- (b) a draft deed for the purposes of clause J5.

### J2      **Independence**

- (1) **Transpower** must provide the reasons why **Transpower** considers that the proposed **verifier** is **independent**.
- (2) **Transpower** must provide a written statement signed by the proposed **verifier**-
  - (a) confirming that-
    - (i) they have not been, and do not intend to be, involved in the formulation of the **IPP proposal** except as a **verifier**;
    - (ii) they have not acted and do not intend to act as an auditor in respect of the **IPP proposal**; and
    - (iii) they have no direct or indirect pecuniary or other interest in the success or failure of the **IPP proposal**, including any entitlement to a success fee, contingency fee, or remuneration other than a fee for providing a **verification report**; and
  - (b) explaining the extent of any-
    - (i) ongoing role they have as auditor of, or advisor to, **Transpower** (on matters unrelated to the **IPP proposal**) including any advisory activities which the **verifier** may expect to undertake for **Transpower** during the next **regulatory period** in relation to **Transpower's capex** and **opex** and the existing or expected basis of remuneration for such activities; and
    - (ii) relationship that the proposed **verifier** has, or that they have had, with **Transpower** during the current **regulatory period** in relation to **Transpower's capex** and **opex** and the basis of remuneration (if any) for the relationship.

### J3      **Qualifications and experience**

- (1) **Transpower** must provide the reasons why **Transpower** considers that the proposed **verifier** is sufficiently qualified and experienced to verify and report on the **IPP proposal**.

- (2) **Transpower** must provide a written statement signed by the proposed **verifier** describing the nature and extent of their qualifications and experience relevant to verifying and reporting on the **IPP proposal**.

**J4 Commission's approval of verifier**

- (1) If, after assessing a proposal provided under clause J1, the **Commission** is satisfied that the proposed **verifier** is **independent** and capable of undertaking the verification, the **Commission** must approve the proposed **verifier**.
- (2) If the **Commission** does not approve a proposed **verifier**-
  - (a) it must provide reasons for the decision; and
  - (b) **Transpower** may propose another **verifier** in accordance with clause J1.
- (3) If the **Commission** approves a proposed **verifier**, **Transpower** may engage the **verifier** in accordance with clause J5.

**J5 Engaging the verifier**

- (1) Before undertaking any work in relation to the proposal, the **verifier** must enter into a deed with the **Commission** and **Transpower**.
- (2) The deed must-
  - (a) impose an overriding duty on the **verifier** to assist the **Commission** as an independent expert on relevant matters within the **verifier's** area of technical expertise, with particular reference to aspects of **capex, opex**, and service quality of **Transpower's** business;
  - (b) require the **verifier** to be available to answer any questions posed by the **Commission** on the **verification report**, in person, by telephone conference or video link, or in writing, as reasonably required by the **Commission**;
  - (c) include a communication protocol that must, as a minimum, require that the **verifier** must keep records of all communication between them and **Transpower** where the communication includes substantive information relied on by the **verifier** in the **verification report**; and
  - (d) set out terms of reference for the **verifier**.
- (3) The deed may contain any other terms, whether or not the terms are consistent with the draft deed provided under clause J1, that-
  - (a) the parties agree are necessary for business efficacy; and
  - (b) are not inconsistent with this schedule.
- (4) The **Commission**, **Transpower**, and the **verifier** may agree to adopt or modify any of the default terms set out in Schedule K for the terms of reference.
- (5) The **Commission** may require any term to be included in the terms of reference that it reasonably considers is necessary.

## SCHEDULE K      **DEFAULT TERMS OF REFERENCE FOR VERIFIERS**

### K1      **Purpose**

- (1) This schedule sets out the default terms of reference for the **verifier** of an **IPP proposal** and includes the evaluation criteria that the **verifier** must apply in undertaking the verification.
- (2) In applying the evaluation criteria, the **verifier** must exercise professional judgement about the relative consideration to give to each of the criteria, having regard to the proportionate scrutiny principle (that is, the principle that the level of scrutiny applied should generally be commensurate with the price and quality impact on **consumers** of the aspect of the proposal being scrutinised).

### K2      **The verifier's role**

The **verifier's** role, purpose and obligations include-

- (a) engaging with **Transpower** in an independent manner in accordance with the deed described in clause J5;
- (b) evaluating whether **Transpower's IPP proposal** and key assumptions are consistent with an expenditure outcome which represents the efficient costs of a prudent electricity transmission services supplier, having regard to:
  - (i) **good electricity industry practice** as reflecting the appropriate planning and performance standards for a prudent supplier; and
  - (ii) the evaluation criteria in Schedule A;
- (c) assessing the extent to which **Transpower's** relevant **policies** and governance processes are consistent with good asset management and the expenditure outcome described in paragraph (b);
- (d) assessing the extent to which **Transpower's** relevant **policies** and governance processes have been effectively implemented in **Transpower's** development of its **IPP proposal**; and
- (e) producing a **verification report** that meets the requirements in this schedule.

### K3      **Content of verification report**

In the **verification report**, the **verifier** must-

- (a) provide an opinion on whether **Transpower's IPP proposal** and key assumptions are consistent with the expenditure outcome described in clause K2(b);
- (b) provide an opinion on the extent to which **Transpower's** relevant **policies** and governance processes are consistent with good asset management

practice and are directed towards the expenditure outcome described in clause K2(b);

- (c) provide an opinion on the extent to which **Transpower's** relevant **policies** and governance processes on which the proposal or its implementation depend have been effectively implemented in **Transpower's** development of its **IPP proposal**;
- (d) provide an opinion on the extent to which **Transpower** has adequately addressed in its proposal its ability to deliver against its proposed **base capex** and proposed **opex** during the **regulatory period** to which the **IPP proposal** relates, taking into account the expected availability of **Transpower** and external resources required to deliver on the proposed work;
- (e) provide an opinion on the extent to which **Transpower's** asset health and network risk modelling has informed the expenditure and **grid output measures** forecasts;
- (f) provide an opinion on the extent and effectiveness of **Transpower's** consultation with its stakeholders;
- (g) provide an opinion on the extent to which **Transpower** has considered stakeholder feedback in preparing its proposal;
- (h) provide a list of the key issues and areas that it considers the **Commission** should focus on when the **Commission** evaluates the **IPP proposal**;
- (i) provide an opinion on whether **Transpower** provided the **verifier** with the type and depth of information it needed to provide its **verification report**; and
- (j) identify any other information not included in the **IPP proposal** that the **verifier** reasonably believes:
  - (i) is available to **Transpower**; and
  - (ii) would assist the **Commission's** evaluation of the **IPP proposal**.

#### K4 **Key process matters**

- (1) **Transpower** must, in accordance with clause 7.6.2, provide the **verifier** with information relevant to the **IPP proposal** at the beginning of the verification process.
- (2) As soon as reasonably practicable after the engagement of the **verifier**, **Transpower** and the **verifier** must agree a timeline for the verification process. The timeline must set out what information **Transpower** will provide to the **verifier** and when.
- (3) In carrying out its verification work, the **verifier** must engage with **Transpower** and the **Commission** on an ongoing basis throughout the verification. However, the

**verifier** is not required to prepare a draft report to be shared with the **Commission** at the conclusion of each stage.

- (4) In preparing the **verification report**, the **verifier** must follow the following process:
  - (a) the **verifier** will first produce a draft **verification report**;
  - (b) the draft report will be provided to **Transpower**, to give **Transpower** the opportunity to comment on the draft report and take account of the **verifier's** draft comments prior to submitting its **IPP proposal** to the **verifier** for final verification;
  - (c) the draft **verification report** will also be made available to the **Commission** to assist the **Commission** in planning for how it will evaluate the **IPP proposal**; and
  - (d) the **Commission** may provide comments on the draft report (with a view to ensuring the final report meets the **Commission's** needs for its later evaluation of the proposal), but the **Commission** need not provide comments on the proposal at this point.
- (5) The **verifier** may update its draft report to take account of any responses or further information provided by **Transpower** or any changes **Transpower** may make to its **IPP proposal**.
- (6) The **verifier** must provide **Transpower** with its final **verification report** so that **Transpower** can submit it to the **Commission** with the proposal no later than the day specified in clause 2.2.1(3).
- (7) **Transpower** must highlight any matters in its **IPP proposal** where it maintains a different view from that of the **verifier**.
- (8) The **Commission** may meet with or question the **verifier** after **Transpower** submits its **IPP proposal** to confirm the **Commission's** understanding of the **verification report** and to inform the **Commission's** plan for its evaluation of the proposal.
- (9) The **Commission** may use the **verifier's** findings to inform a consultation paper that the **Commission** will publish to invite stakeholder comment on the **IPP proposal**. The **Commission** may consult on the extent to which it should rely on the **verifier's** findings in its evaluation of the proposal.

#### K5 **What the verifier will review (scope of work)**

- (1) In preparing its **verification report**, the **verifier** must review:
  - (a) the **opex** and **base capex** that **Transpower** has proposed, with emphasis on **identified programmes**, broken down into the following expenditure types, and any further expenditure types as agreed:
    - (i) **opex**;
    - (ii) **base capex** relating to **asset replacement** and **asset refurbishment**;

- (iii) **E & D base capex;**
  - (iv) **opex and capex relating to information system and technology assets;**  
and
  - (v) **capex relating to business support;**
- (b) the **grid output measures** that **Transpower** has proposed;
  - (c) the extent to which **Transpower** adequately demonstrates that its **IPP proposal** is consistent with the relevant **input methodologies**;
  - (d) the extent of **Transpower's** stakeholder engagement (including on **grid output measures**) and how **Transpower** has incorporated stakeholder feedback;
  - (e) to the extent that **Transpower** includes **low incentive rate base capex projects** in its **IPP proposal**, whether those **projects** should be specified by the **Commission** as **low incentive rate base capex projects**;
  - (f) whether any **E & D base capex projects** or **programmes** included in the **IPP proposal** are subject to uncertainty such that the **Commission** should consider making those **projects** or **programmes** subject to a **base capex allowance adjustment mechanism**. For any such **projects** or **programmes**, the **verifier** should also provide its view on the appropriate pre-set **base capex** amounts of any such adjustments that should be provided for during the **regulatory period** and what the trigger thresholds should be for these **base capex** amounts;
  - (g) whether any **E & D base capex projects** or **programmes** included in **Transpower's IPP proposal** are subject to such uncertainty of timing or amount that the **verifier** recommends to the **Commission** that it should not include them in the **base capex allowance**, with the view that **Transpower** would apply for reconsideration of the **IPP** for eligible **E & D base capex projects** during the **IPP regulatory period** in accordance with the **Transpower Input Methodologies Determination 2010**. The **verifier** should also provide its view on **Transpower's** proposed arrangements for the **projects** or **programmes**; and
  - (h) to the extent that **Transpower** includes **listed projects** in its **IPP proposal**, whether those projects meet the criteria to be specified by the **Commission** as **listed projects**.
- (2) Except to the extent necessary to perform its verification role in accordance with the deed described in clause J5, the **verifier** is not required to review issues relating to the form of control (e.g., smoothed price path and reopener provisions, applications of the **listed projects** mechanism, or processes for annual forecast MAR updates).

- (1) In preparing its **verification report**, the **verifier** must have regard to the evaluation criteria specified in Schedule A and any of the following that are relevant:
  - (a) **Transpower's policies** and processes;
  - (b) **Transpower's** application of its **policies** and processes;
  - (c) **Transpower's** relevant strategic documents published from time to time;
  - (d) the consistency of the **IPP proposal** with the strategies set out in the strategic documents;
  - (e) information supplied by **Transpower** to the **verifier** in the course of the verification process;
  - (f) the proportionate scrutiny principle;
  - (g) Schedules F and FA;
  - (h) **Transpower's** performance in the current and in previous **regulatory periods**; and
  - (i) international best practices where appropriate in a New Zealand context.
- (2) The **verifier** is not required to audit the quantitative information in the **IPP proposal**. However, the **verifier** must provide an assessment on the effectiveness of the process used to assemble the quantitative information that informs the **IPP proposal** (consistent with clause K3(c)).

K7 **General evaluation of opex proposal**

- (1) The **verifier** must have regard to the following factors when evaluating the **opex proposal**:
  - (a) the reasonableness of the key assumptions relied upon, including-
    - (i) the method and information used to develop them;
    - (ii) how they were applied; and
    - (iii) their effect on the proposed **opex**;
  - (b) whether **policies** regarding the need for, and prioritisation of, **projects** and **programmes** demonstrate a risk-based approach consistent with **good electricity industry practice** and are directed towards achieving the expenditure outcome described in clause K2(b);
  - (c) the overall deliverability of the proposed **opex** during the current **regulatory period**;
  - (d) the reasonableness and adequacy of any models used, including but not limited to asset replacement models, to prepare the proposed **opex** including-
    - (i) inputs to the model; and

- (ii) the methods used to check the reasonableness of the forecasts and related expenditure;
  - (e) the reasonableness of the key assumptions, key input data and forecasting methods used in determining demand forecasts;
  - (f) the appropriateness of using those demand forecasts and other key assumptions in determining the proposed **opex**;
  - (g) the extent to which **Transpower** has demonstrated the type of efficiency improvements obtained in the current and previous **regulatory periods**;
  - (h) the extent to which **Transpower** has demonstrated the scope for efficiency improvements during the **regulatory period** in question; and
  - (i) any other factor or approach the **Commission** considers appropriate in the circumstances.
- (2) The **Commission** may, where relevant and despite anything to the contrary in this schedule, consider **opex** and **base capex** together given the potential cost trade-offs between **opex** and **base capex**.

**K8 Specific evaluation of opex proposal**

In addition to the criteria in clause K7, when evaluating the **opex proposal**, the **verifier** must review and assess:

- (a) any other **opex** drivers not covered by the key assumptions that have contributed to the proposed **opex** allowance, and whether the **opex** associated with these drivers is consistent with the expenditure outcome described in clause K2(b);
- (b) the reasonableness of the methodologies used in establishing the proposed **opex** (such as cost benchmarking or internal historic cost trending), including the relationship between the proposed **opex** and the proposed **base capex**;
- (c) the reasonableness of any **opex** reduction initiatives undertaken or planned during the current or next **regulatory period**; and
- (d) the reasonableness of any efficiencies built into the proposed **opex** as a result of the investment programmes carried out in past **regulatory periods**.

**K9 Evaluation of identified programmes**

In evaluating the **opex proposal**, the **verifier** must undertake a review of each **identified programme**, and such a review must include evaluation of at least-

- (a) whether **policies** regarding the need for the **identified programme** and its priority demonstrate a risk-based approach consistent with good asset management practice and were applied appropriately;
- (b) whether other relevant **policies** and planning standards were applied appropriately;

- (c) **Transpower's** process to determine the **identified programme's** reasonableness and cost-effectiveness;
- (d) **Transpower's** internal processes for challenging a need for an **identified programme** and the possible alternative solutions;
- (e) how key drivers, assumptions, and cost modelling were used to determine its forecast **operating expenditure**;
- (f) the capital costing methodology and formulation, including unit rate sources and the quantum of included contingencies;
- (g) the effect of its forecast **capex** on **opex**;
- (h) the effect of its forecast **opex** on other cost categories, including the relationship with **capex**;
- (i) links with other **projects** or **programmes**, whether proposed or in progress; and
- (j) the proposed approach to procurement of associated goods and services.

#### K10 **Evaluation techniques**

In undertaking the evaluations described in this schedule, the **verifier** may employ one or more of the following techniques:

- (a) process benchmarking;
- (b) process or functional modelling;
- (c) trending or time-series analysis;
- (d) high level governance and process reviews;
- (e) internal benchmarking of forecast costs against costs in the current **regulatory period**;
- (f) **project** and **programme** sampling;
- (g) critiques or independent development of-
  - (i) demand forecasts;
  - (ii) labour unit cost forecasts;
  - (iii) materials forecasts;
  - (iv) plant forecasts; and
  - (v) equipment unit cost forecasts; and
- (h) any other technique or approach that the **verifier** considers appropriate in the circumstances.