

## **[DRAFT] Transpower Individual Price-Quality Path Determination 2020**

**[2019] NZCC [XX]**

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

## **Part 1: General provisions**

1. Title
  - 1.1 This determination is the Transpower Individual Price-Quality Path Determination 2020.
2. Commencement
  - 2.1 This determination takes effect on 1 April 2020.
3. Application
  - 3.1 This determination applies to **Transpower** in relation to the supply of **electricity lines services** for **RCP3**.
4. Interpretation
  - 4.1 Unless the context otherwise requires—
    - 4.1.1 terms appearing in bold type (except for headings) in this determination are defined terms;
    - 4.1.2 terms used in this determination that are defined in the **IMs**, but not in this determination, have the meaning given in the **IMs**;
    - 4.1.3 terms used in this determination that are defined in the **Act**, but not in this determination, or in the **IMs**, have the meaning given in the **Act**;
    - 4.1.4 any reference to a period of time is interpreted in accordance with section 35 of the Interpretation Act 1999;
    - 4.1.5 for the avoidance of doubt, references to terms from legislation in this determination have the meaning given in the applicable legislation at the time they are applied;
    - 4.1.6 financial items must be measured and disclosed in accordance with **GAAP**, unless otherwise required by this determination or the **IMs**;
    - 4.1.7 non-financial items must be measured and disclosed in accordance with standard industry practice unless otherwise required in this determination, or the **IMs**;
    - 4.1.8 an obligation to do something is deemed to include an obligation to cause that thing to be done; and
    - 4.1.9 a word which denotes the singular also denotes the plural and vice versa.
  - 4.2 If there is any inconsistency between the main body of this determination and any attachment or schedule to this determination, the main body of this determination prevails.

5. Individual price-quality path

5.1 **Transpower** must comply with the individual price-quality path, which consists of:

5.1.1 the price path in Part 3; and

5.1.2 the quality standards and performance measures in Part 4.

5.2 **Transpower** must comply with the requirements to provide compliance statements and information disclosures in Part 5.

6. Applicable input methodologies

6.1 **Transpower** must apply the requirements set out in the following **IMs** where applicable when complying with this determination:

6.1.1 the **Transpower IM**; and

6.1.2 the **Capex IM**.

## Part 2: Defined terms

7. In this determination, unless the context otherwise requires:

### A

**Act**

Commerce Act 1986;

**actual transmission revenue**

means the sum of amounts received by **Transpower** in the **relevant pricing year** for:

(a) **HVAC revenue**;

(b) **HVDC revenue**;

**AHI**

means **Transpower's** asset health assessment for the relative health of an asset in the range between 1 and 10, where an index of 8 or above denotes an asset in poor or very poor condition;

**annual compliance statement**

means a written statement made by **Transpower** under clause 16 and associated information;

**asset health measure**

means the percentage of assets in an **asset health measure asset class** with an **AHI** of 8 or more;

<b>asset health measure asset class</b>	means an asset class that is subject to the asset health quality standards and is one of the following: <ul style="list-style-type: none"> <li>(a) tower grillage foundation;</li> <li>(b) tower protective coating;</li> <li>(c) insulators;</li> <li>(d) power transformers;</li> <li>(e) outdoor circuit breakers;</li> </ul>
<b>asset performance measure</b>	has the meaning given in the <b>Capex IM</b> ;
<b>assurance auditor</b>	means a person who: <ul style="list-style-type: none"> <li>(a) is qualified for appointment as auditor of a company under the Companies Act 1993;</li> <li>(b) has no relationship with, or interest in, <b>Transpower</b> that is likely to involve a conflict of interest;</li> <li>(c) has not assisted with the compilation of either <b>Transpower's</b> proposed <b>forecast MAR</b> and <b>forecast SMAR</b> calculations or the <b>annual compliance statement</b>, or provided advice or opinions (other than in relation to <b>independent assurance reports</b>) on the methodologies or processes used in compiling either <b>Transpower's</b> proposed <b>forecast MAR</b> and <b>forecast SMAR</b> calculations or the <b>annual compliance statement</b>; and</li> <li>(d) is not associated with or directed by any person who has provided any such assistance, advice or opinion;</li> </ul>
<b>B</b>	
<b>base capex</b>	has the meaning given in the <b>Capex IM</b> ;
<b>base capex allowance</b>	has the meaning given in the <b>Capex IM</b> ;
<b>base capex expenditure adjustment</b>	has the meaning given in the <b>Capex IM</b> ;

<b>base capex incentive rates</b>	means the <b>base capex low incentive rate</b> and <b>base capex standard incentive rate</b> ;
<b>base capex low incentive rate</b>	has the meaning given in the <b>Capex IM</b> ;
<b>base capex standard incentive rate</b>	has the meaning given in the <b>Capex IM</b> ;

## C

<b>cap</b>	has the meaning given in the <b>Capex IM</b> and for the purposes of this determination are specified in Tables 4.1 and 4.2;
<b>capex</b>	has the meaning given in the <b>Capex IM</b> ;
<b>Capex IM</b>	means the <i>Transpower Capital Expenditure Input Methodology Determination</i> [2012] NZCC 2, including, for the avoidance of doubt, any amendment applicable to <b>RCP3</b> ;
<b>capital expenditure</b>	has the meaning given in the <b>Transpower IM</b> ;
<b>catastrophic event</b>	has the meaning specified in clause 3.7.1 of the <b>Transpower IM</b> ;
<b>code</b>	has the meaning given in the Electricity Industry Act 2010;
<b>collar</b>	has the meaning given in the <b>Capex IM</b> and for the purposes of this determination are specified in Tables 4.1 and 4.2;
<b>Commission</b>	has the meaning given in the <b>Act</b> ;
<b>commissioned</b>	has the meaning given in the <b>Transpower IM</b> ;

<b>commodity instrument that is not an effective hedge</b>	means an instrument acquired by or entered into by <b>Transpower</b> in accordance with its policy on <b>capital expenditure</b> hedging in respect of an exposure to commodity prices, and the instrument does not qualify for hedge accounting in accordance with <b>GAAP</b> at the date of being entered into or acquired and that results in a gain or loss being incorporated into its Statement of Comprehensive Income or equivalent audited statement of income and expenses for financial accounting purposes;
<b>consumer</b>	means any generator, distribution business, end user, or other entity in New Zealand that is connected, or applies to be connected, to the <b>grid</b> ;
<b>corporate tax rate</b>	has the meaning given in the <b>Transpower IM</b> ;
<b>CPI</b>	has the meaning given in the <b>Capex IM</b> ;
<b>customer</b>	has the meaning given in section 52C of the <b>Act</b> ;
<b>customer service measure</b>	means a reporting measure for disclosure of the timeliness of communications and information provided to affected <b>customers</b> after an <b>interruption</b> event;
<b>D</b>	
<b>depreciation</b>	has the meaning given in the <b>Transpower IM</b> ;
<b>director</b>	has the meaning given in the <b>Capex IM</b> ;
<b>disclosure year</b>	has the meaning given in the <b>Transpower IM</b> ;
<b>disposed asset</b>	has the meaning given in the <b>Transpower IM</b> ;
<b>duration</b>	means the elapsed time of an <b>unplanned interruption</b> (in minutes, rounded to the nearest whole minute) from the start of that <b>unplanned interruption</b> until the earlier of: <ul style="list-style-type: none"> <li>(a) <b>restoration</b>; or</li> <li>(b) seven days after that <b>unplanned interruption</b> commenced;</li> </ul>



## E

<b>Electricity Authority</b>	has the meaning given in the <b>Transpower IM</b> ;
<b>electricity lines services</b>	has the meaning given in the <b>Act</b> ;
<b>engineer</b>	has the meaning given in the <b>Transpower IM</b> ;
<b>EV account</b>	has the meaning given in the <b>Transpower IM</b> ;
<b>EV account entry</b>	<p>means, for any <b>disclosure year</b> of <b>RCP3</b> or for the <b>RCP2 disclosure year</b> ending 30 June 2020, an entry into either of the <b>HVAC</b> or <b>HVDC EV accounts</b> to record:</p> <ul style="list-style-type: none"> <li>(a) an after-tax <b>ex-post economic gain or loss</b>;</li> <li>(b) an after-tax <b>gain or loss on capital expenditure commitments</b>;</li> <li>(c) an after-tax economic gain or loss calculated for a <b>base capex expenditure adjustment, grid output adjustment, or major capex expenditure and output adjustment</b>;</li> <li>(d) an after-tax economic gain or loss calculated for a <b>major capex sunk costs adjustment</b>; or</li> <li>(e) an after-tax economic gain or loss calculated in accordance with clauses 27.1.3(a), 27.1.3(b) and 27.1.3(c);</li> </ul>
<b>EV adjustment</b>	means, in relation to a <b>disclosure year</b> , an input to the <b>forecast MAR</b> , calculated in accordance with clause 28.1 for the purpose of returning to or recovering from <b>customers</b> a portion of the <b>EV account</b> balance applying to those <b>customers</b> ;
<b>ex-post economic gain or loss</b>	means, for any <b>disclosure year</b> , the difference (expressed as a positive or negative amount) between the capital charge and the net operating profit/(loss) after tax for that <b>disclosure year</b> , as calculated in accordance with clause 24.1;
	F
<b>forecast CPI</b>	has the meaning given in the <b>Capex IM</b> ;

<b>forecast FX rate</b>	has the meaning given in the <b>Capex IM</b> ;
<b>forecast MAR</b>	means, for each <b>relevant pricing year</b> in <b>RCP3</b> , the forecast maximum building blocks allowable revenue for a <b>disclosure year</b> as determined by the <b>Commission</b> and recorded in the list of <b>forecast MAR</b> in Schedule A;
<b>forecast SMAR</b>	means for each <b>relevant pricing year</b> the amount set out in Column 9 in Schedule A, or as calculated in accordance with clause 25 and amended in accordance with clause 3.7.5 of the <b>Transpower IM</b> ;
<b>found asset</b>	has the meaning given in the <b>Transpower IM</b> ;
	<b>G</b>
<b>GAAP</b>	has the meaning given in the <b>Transpower IM</b> ;
<b>gain or loss on capital expenditure commitments</b>	means a gain or loss required under <b>GAAP</b> to be recognised in profit or loss in <b>Transpower's</b> Statement of Comprehensive Income in respect of: <ul style="list-style-type: none"> <li>(a) foreign currency <b>capital expenditure</b> commitments and associated designated hedges; and</li> <li>(b) commodity hedge instruments;</li> </ul>
<b>good electricity industry practice</b>	has the meaning given in Part 1 of the <b>code</b> ;
<b>grid</b>	has the meaning given in the <b>Capex IM</b> ;
<b>grid output</b>	has the meaning given in the <b>Capex IM</b> ;
<b>grid output adjustment</b>	has the meaning given in the <b>Capex IM</b> ;
<b>grid output incentive rate</b>	has the meaning given in the <b>Capex IM</b> and for the purposes of this determination are specified in Tables 4.1 and 4.2;
<b>grid output measure</b>	has the meaning given in the <b>Capex IM</b> ;
<b>grid output target</b>	has the meaning given in the <b>Capex IM</b> and for the purposes of this determination are specified in Tables 4.1 and 4.2;

**H**

<b>HVAC</b>	high voltage alternating current;
<b>HVAC revenue</b>	means, in relation to a <b>disclosure year</b> , the <b>HVAC transmission revenue</b> for the <b>relevant pricing year</b> including <b>pass-through costs</b> and <b>recoverable costs</b> passed on to any <b>customer</b> ;
<b>HVAC transmission revenue</b>	means revenue (net of rebates) received by <b>Transpower</b> from <b>customers</b> in respect of the use by <b>Transpower</b> of <b>Transpower's HVAC</b> transmission system for the purpose of providing <b>transmission lines services</b> to <b>customers</b> ;
<b>HVDC</b>	means high voltage direct current;
<b>HVDC pole</b>	means an <b>HVDC</b> system circuit between Benmore and Haywards comprising the converter stations at Benmore and Haywards and the <b>HVDC</b> transmission circuit between them, carried on <b>HVDC</b> overhead line and undersea cable, connecting the converter stations;
<b>HVDC revenue</b>	means, in relation to a <b>disclosure year</b> , the <b>HVDC transmission revenue</b> for the <b>relevant pricing year</b> including <b>pass-through costs</b> and <b>recoverable costs</b> passed on to any <b>customer</b> ;
<b>HVDC transmission revenue</b>	means revenue (net of rebates) received by <b>Transpower</b> from <b>customers</b> in respect of the use by <b>Transpower</b> of <b>Transpower's HVDC</b> transmission system for the purpose of providing <b>transmission lines services</b> to <b>customers</b> ;
<b>I</b>	
<b>IMs</b>	means the <b>Transpower IM</b> and the <b>Capex IM</b> taken together;
<b>ID determination</b>	has the meaning given in the <b>Transpower IM</b> ;
<b>Incremental rolling incentive scheme (IRIS)</b>	means the incentive scheme specified in Part 3, subpart 6 of the <b>Transpower IM</b> ;

<b>independent assurance report</b>	means a report issued by an <b>assurance auditor</b> on an <b>annual compliance statement</b> in accordance with clause 30;
<b>instrument that ceases to be an effective hedge</b>	means a financial instrument entered into or acquired by <b>Transpower</b> in accordance with its policy on <b>capital expenditure</b> hedging that qualifies as an effective hedge at the date of entering into or acquiring the instrument, but that ceases during the <b>disclosure year</b> to qualify for hedge accounting in accordance with <b>GAAP</b> , and such ceasing to qualify results in a gain or loss being incorporated into its Statement of Comprehensive Income or equivalent audited statement of income and expenses for financial accounting purposes;
<b>interruption</b>	means the cessation of conveyance of electricity from <b>grid</b> assets owned by <b>Transpower</b> to the assets owned or operated by a <b>customer</b> at a point of service to the <b>grid</b> ;
<b>IPP revenue growth rate</b>	means the maximum allowable annual percentage growth in <b>forecast SMAR</b> for each <b>pricing year</b> ;
	<b>L</b>
<b>listed project</b>	has the meaning given in the <b>Capex IM</b> ;
<b>lost asset</b>	has the meaning given in the <b>Transpower IM</b> ;
	<b>M</b>
<b>major capex</b>	has the meaning given in the <b>Capex IM</b> ;
<b>major capex expenditure and output adjustment</b>	has the meaning given in the <b>Capex IM</b> ;
<b>major capex incentive rate</b>	has the meaning given in the <b>Capex IM</b> ;
<b>major capex project</b>	has the meaning given in the <b>Capex IM</b> ;
<b>major capex proposal</b>	has the meaning given in the <b>Capex IM</b> ;
<b>major capex sunk costs adjustment</b>	has the meaning given in the <b>Capex IM</b> ;

**measure of grid performance** has the meaning given in the **Capex IM** and for the purposes of this determination are specified in clauses 10.2 and 13.1.1;

**momentary interruption** means an **interruption** that is not planned, which has a **duration** of less than one minute;

## N

**new investment contract** has the meaning given in the **Transpower IM**;

## O

**opening RAB value** has the meaning given in the **Transpower IM**;

**operating cost** has the meaning given in the **Transpower IM**;

**operating expenditure** has the meaning given in the **Transpower IM**;

**opex allowance** means, for each **disclosure year**, the amount of **operating expenditure** specified by the **Commission** for the purposes of:

- (a) calculating the **forecast MAR**;
- (b) calculating the **ex-post economic gain or loss**; or
- (c) calculating the **opex incentive amount**;

**opex incentive amount** has the meaning given in the **Transpower IM**;

**other regulated income** means income associated with the supply of **transmission lines services**, excluding **actual transmission revenue** and investment-related income;

**outage** has the meaning set out in clause 12.130 of the **code**, as amended from time to time, other than as specified in **code** sub clauses 12.130(2)(c) and 12.130(2)(d), and excludes those that are:

- (a) at the request of, or caused by, a **customer**; and
- (b) due to correct operation of **Transpower's** assets caused by events in the **customer's** assets;

**P****pass-through costs**has the meaning given in the **Transpower IM**;**point of service sub-category**

means a group of points of service identified by reference to a characteristic of service, as set out in Table 4.1 and Schedule F, and is one of the following;

- (a) in relation to GP1:
  - (i) GP1A: “N-1 security high economic consequence”;
  - (ii) GP1B: “N-1 security material economic consequence”;
  - (iii) GP1C: “N security high economic consequence”;
  - (iv) GP1D: “N security material economic consequence”;
  - (v) GP1E: “N-1 security generator”;  
and
  - (vi) GP1F: “N security generator”;
- (b) in relation to GP2:
  - (i) GP2A: “N-1 security high economic consequence”;
  - (ii) GP2B: “N-1 security material economic consequence”;
  - (iii) GP2C: “N security high economic consequence”;
  - (iv) GP2D: “N security material economic consequence”;
  - (v) GP2E: “N-1 security generator”;  
and
  - (vi) GP2F: “N security generator”;

**pricing compliance statement**means a written statement made by **Transpower** under clause 15;

<b>pricing year</b>	has the meaning given in the <b>Transpower IM</b> ;
<b>programme</b>	has the meaning given in the <b>Capex IM</b> ;
<b>project</b>	has the meaning given in the <b>Capex IM</b> ;
<b>Project k</b>	means the <b>HVDC Pole 2</b> life-extension project planned by <b>Transpower</b> in <b>RCP3</b> ;
<b>publicly disclose (or public disclosure)</b>	means to make permanently available on <b>Transpower's</b> website and to notify the <b>Commission</b> that it has been made permanently available on <b>Transpower's</b> website;

## R

<b>RCP2</b>	means the period prior to <b>RCP3</b> , being the period from 1 April 2015 to 31 March 2020, provided that references to the final <b>disclosure year</b> in <b>RCP2</b> means the <b>disclosure year</b> ending on 30 June 2020;
<b>RCP3</b>	means the <b>regulatory period</b> from 1 April 2020 to 31 March 2025, provided that references to the final <b>disclosure year</b> in <b>RCP3</b> means the <b>disclosure year</b> ending on 30 June 2025;
<b>RCP3 proposal</b>	means <b>Transpower's</b> proposal of 23 November 2018 setting out its forecast expenditure and proposed <b>grid output measures</b> for <b>RCP3</b> ;
<b>recoverable cost</b>	has the meaning given in the <b>Transpower IM</b> ;
<b>regulatory period</b>	means a period determined by the <b>Commission</b> under the <b>Act</b> , during which a particular individual price-quality path determination applies to <b>Transpower</b> , including but not limited to <b>RCP2</b> or <b>RCP3</b> ;
<b>regulatory tax allowance</b>	means the tax allowance determined in accordance with clause 3.4.1 of the <b>Transpower IM</b> ;

<b>relevant pricing year</b>	in relation to a <b>disclosure year</b> , means the <b>pricing year</b> commencing on 1 April immediately before the start of that <b>disclosure year</b> ;
<b>restoration</b>	<p>to a <b>customer</b>, means the earliest of:</p> <p>(a) for generators:</p> <ul style="list-style-type: none"> <li>(i) when the generator circuit breaker is closed; or</li> <li>(ii) the generator is notified that <b>Transpower</b> equipment has been returned to service and is available for generation to be reconnected; or</li> <li>(iii) operational control for connecting the <b>Transpower</b> assets is returned to the generator; and</li> </ul> <p>(b) for <b>customers</b> other than generators:</p> <ul style="list-style-type: none"> <li>(i) when the first feeder is closed, if feeder circuit breakers have been opened; or</li> <li>(ii) when the supply bus is relivened, if feeder circuit breakers have remained closed after the <b>interruption</b>; or</li> <li>(iii) when 75% of the load is returned to service by way of a backfeed within the <b>customer's</b> system or by generators; or</li> <li>(iv) when <b>Transpower</b> has readied all its equipment and has made reasonable efforts to advise the <b>customer</b> that the equipment can be returned to service;</li> </ul>
<b>revenue-linked grid output measure</b>	has the meaning given in the <b>Capex IM</b> ;



## S

**system operator** has the meaning given in the **Transpower IM**;

## T

**tax rules** has the meaning given in the **Transpower IM**;

**term credit spread differential allowance** has the meaning given in the **Transpower IM**;

**TPM** means the transmission pricing methodology specified in the **code**, as amended from time to time;

**transmission lines services** means all **electricity lines services** supplied by **Transpower** excluding:

- (a) **electricity lines services** performed by **Transpower** as **system operator**; and
- (b) **new investment contracts**;

**Transpower** has the meaning given in the **Act**;

**Transpower IM** means the *Transpower Input Methodologies Determination* [2012] NZCC 17, including, for the avoidance of doubt, any amendment applicable to **RCP3**;

**U****unplanned interruption**

means any **interruption** for a period of one minute or longer in respect of which less than 24 hours' notice, or no notice, was given, either to the public or to **customers** affected by the **interruption** and excludes any:

- (a) unplanned interruptions originating on another party's system and where the **Transpower grid** operated correctly; and
- (b) unplanned **interruptions** to the auxiliary load used by electricity generator assets;

**V****value of commissioned asset**

has the meaning given in the **Transpower IM**;

**value of found asset**

has the meaning given in the **Transpower IM**;

**W****WACC**

means, for the purpose of calculating an annual update of a **forecast MAR**, **forecast SMAR** or an **ex-post economic gain or loss**, the weighted average cost of capital published by the **Commission** in accordance with Part 3 of the **Transpower IM**;

**working day**

has the meaning given in the **Act**;

**works under construction**

has the meaning given in the **Transpower IM**.

### Part 3: Price path

#### 8. Maximum revenues

- 8.1 The maximum revenue that **Transpower** may recover for each **pricing year** in the **RCP3** is the **forecast SMAR**.
- 8.2 The forecast **HVAC revenue** and forecast **HVDC revenue** that **Transpower** uses for setting charges under the **TPM** for the **relevant pricing year** must not, in aggregate, exceed the **forecast SMAR**.
- 8.3 When the **Commission** reconsiders **Transpower's** individual price-quality path under clauses 3.7.4(1)(a)(v) or 3.7.4(4) of the **Transpower IM** and determines in accordance with clause 3.7.5 of the **Transpower IM** that it should be amended, **Transpower** must provide to the **Commission** at the same time as the **annual compliance statement** for the applicable **disclosure year**, a proposed updated **forecast MAR** and proposed updated **forecast SMAR**.
- 8.4 For the purposes of clause 8.3, the proposed updated **forecast SMAR** must provide **forecast SMAR** for the remaining **pricing years** of **RCP3** based on the calculations required in clause 25 using Schedule D, and must include any supporting information.

#### 9. Forecast SMAR

- 9.1 The **forecast SMAR** for each **pricing year** in **RCP3**, subject to any reconsideration and amendments determined by the **Commission** by the last day of November in each year, is specified in Schedule A.

### Part 4: Quality standards and performance measures

#### 10. Revenue-linked performance measures

- 10.1 For the purposes of calculating the **grid output adjustment** under clause 12 and the measures specified in Table 4.1 and Table 4.2, the **revenue-linked grid output measures** are the:
  - 10.1.1 **measures of grid performance** specified in clause 10.2;
  - 10.1.2 **asset performance measures** specified in clause 10.3;
- 10.2 For the purpose of clause 10.1.1, the **measures of grid performance** are:
  - 10.2.1 GP1, which measures the total number of **unplanned interruptions** for each **point of service sub-category** during a **disclosure year**; and
  - 10.2.2 GP2, which measures the average **duration** of **unplanned interruptions** for each **point of service sub-category** during a **disclosure year**.

10.3 The **asset performance measures** are:

10.3.1 AP1, which measures **HVDC** energy availability of the **HVDC poles** 2 and 3 as a percentage of annual capacity during a **disclosure year**, as set out in Table 4.2 and as described in clauses 11.26 to 11.28. Performance is assessed each **disclosure year** against the quality standard specified in clause 11.27 and the reporting required under clauses 16, 18 and 20; and

10.3.2 AP2, which measures average percentage of time that the **HVAC** circuits listed in Schedule G are available during a **disclosure year**, as set out in Table 4.2 and as described in clauses 11.30 to 11.32. Performance is assessed each **disclosure year** against the quality standard specified in clause 11.31 and the reporting required under clause 16, 18 and 20.

11. Revenue-linked quality standards and grid output measures

11.1 The **point of service sub-category** limits for each **point of service sub-category** of the **measures of grid performance** GP1 and GP2 and the quality standard for **asset performance measures** AP1 and AP2 are identified for each **revenue-linked grid output measure** as shown in Table 4.1 and Table 4.2.

11.2 For the **disclosure year** from 1 July 2020 to 30 June 2021, **Transpower** must calculate assessed values for each **measure of grid performance** GP1 **point of service sub-category measure** in Table 4.1 in accordance with clauses 11.8 to 11.13.

*Compliance with GP1 quality standard*

11.3 For the **disclosure year** from 1 July 2021 to 30 June 2022, **Transpower** must either:

11.3.1 comply with the **measure of grid performance** GP1 assessment specified in clause 11.7; or

11.3.2 have assessed values for five or more of the **point of service sub-categories** for the **disclosure year** from 1 July 2020 to 30 June 2021 which did not exceed the **point of service sub-category** limit specified for each of those **measure of grid performance** GP1 **point of service sub-categories** in Table 4.1, as calculated in accordance with clauses 11.8 to 11.13.

11.4 For the **disclosure year** from 1 July 2022 to 30 June 2023, **Transpower** must either:

11.4.1 comply with the **measure of grid performance** GP1 assessment specified in clause 11.7; or

11.4.2 have:

- (a) complied with the **measure of grid performance** GP1 assessment specified in clause 11.7 for the **disclosure year** from 1 July 2021 to 30 June 2022; and

- (b) assessed values for five or more of the **point of service sub-categories** for the **disclosure year** from 1 July 2020 to 30 June 2021 which did not exceed the **point of service sub-category** limit specified for each of those **measure of grid performance GP1 point of service sub-category** measures in Table 4.1, as calculated in accordance with clauses 11.8 to 11.13.
- 11.5 For the **disclosure year** from 1 July 2023 to 30 June 2024, **Transpower** must:
- 11.5.1 comply with the **measure of grid performance** GP1 assessment specified in clause 11.7; or
- 11.5.2 have complied with the **measure of grid performance** GP1 assessment specified in clause 11.7 in each of the two preceding **disclosure years** of **RCP3**.
- 11.6 For the **disclosure year** from 1 July 2024 to 30 June 2025, **Transpower** must:
- 11.6.1 comply with the **measure of grid performance** GP1 assessment specified in clause 11.7; or
- 11.6.2 have complied with the **measure of grid performance** GP1 assessment specified in clause 11.7 in each of the two preceding **disclosure years** of **RCP3**.
- 11.7 For the purposes of clauses 11.3 to 11.6, to comply with the **measure of grid performance** GP1 assessment, **Transpower's** assessed value for five or more of the **point of service sub-categories** for the **disclosure year** must not exceed the **point of service sub-category** limit specified for the **disclosure year** for each of those **measure of grid performance GP1 point of service sub-categories** in Table 4.1.
- 11.8 For the purposes of clause 11.2 and 11.7, **Transpower's** assessed value for **point of service sub-category** GP1A for a **disclosure year** is calculated in accordance with the formula:
- GP1A assessed value = the sum of **unplanned interruptions** for the **point of service sub-category** GP1A commencing within the **disclosure year**.
- 11.9 For the purposes of clause 11.2 and 11.7, **Transpower's** assessed value for **point of service sub-category** GP1B for a **disclosure year** is calculated in accordance with the formula:
- GP1B assessed value = the sum of **unplanned interruptions** for the **point of service sub-category** GP1B commencing within the **disclosure year**.
- 11.10 For the purposes of clause 11.2 and 11.7, **Transpower's** assessed value for **point of service sub-category** GP1C for a **disclosure year** is calculated in accordance with the formula:
- GP1C assessed value = the sum of **unplanned interruptions** for the **point of service sub-category** GP1C commencing within the **disclosure year**.

- 11.11 For the purposes of clause 11.2 and 11.7, **Transpower's** assessed value for **point of service sub-category** GP1D for a **disclosure year** is calculated in accordance with the formula:

GP1D assessed value = the sum of **unplanned interruptions** for the **point of service sub-category** GP1D commencing within the **disclosure year**.

- 11.12 For the purposes of clause 11.2 and 11.7, **Transpower's** assessed value for **point of service sub-category** GP1E for a **disclosure year** is calculated in accordance with the formula:

GP1E assessed value = the sum of **unplanned interruptions** for the **point of service sub-category** GP1E commencing within the **disclosure year**.

- 11.13 For the purposes of clause 11.2 and 11.7, **Transpower's** assessed value for **point of service sub-category** GP1F for a **disclosure year** is calculated in accordance with the formula:

GP1F assessed value = the sum of **unplanned interruptions** for the **point of service sub-category** GP1F commencing within the **disclosure year**.

- 11.14 For the **disclosure year** from 1 July 2020 to 30 June 2021, **Transpower** must calculate assessed values for each **measure of grid performance** GP2 **point of service sub-categories** in Table 4.1 in accordance with clauses 11.20 to 11.25.

*Compliance with GP2 quality standard*

- 11.15 For the **disclosure year** from 1 July 2021 to 30 June 2022, **Transpower** must either:

11.15.1 comply with the **measure of grid performance** GP2 assessment specified in clause 11.19; or

11.15.2 have assessed values for five or more of the **point of service sub-category measures** for the **disclosure year** from 1 July 2020 to 30 June 2021 which did not exceed the **point of service sub-category** limit specified for each of those **measure of grid performance** GP2 **point of service sub-category measures** in Table 4.1, as calculated in accordance with clauses 11.20 to 11.25.

- 11.16 For the **disclosure year** from 1 July 2022 to 30 June 2023, **Transpower** must either:

11.16.1 comply with the **measure of grid performance** GP2 assessment specified in clause 11.19; or

11.16.2 have:

- (a) complied with the **measure of grid performance** GP2 assessment specified in clause 11.19 for the **disclosure year** from 1 July 2021 to 30 June 2022; and

- (b) assessed values for five or more of the **point of service sub-category measures** for the **disclosure year** from 1 July 2020 to 30 June 2021 which did not exceed the **point of service sub-category limit** specified for each of those **measures of grid performance GP2 point of service sub-category measures** in Table 4.1, as calculated in accordance with clauses 11.20 to 11.25.

11.17 For the **disclosure year** from 1 July 2023 to 30 June 2024, **Transpower** must:

11.17.1 comply with the **measure of grid performance** GP2 assessment specified in clause 11.19; or

11.17.2 have complied with the **measure of grid performance** GP2 assessment specified in clause 11.19 in each of the two preceding **disclosure years** of **RCP3**.

11.18 For the **disclosure year** from 1 July 2024 to 30 June 2025, **Transpower** must:

11.18.1 comply with the **measure of grid performance** GP2 assessment specified in clause 11.19; or

11.18.2 have complied with the **measure of grid performance** GP2 assessment specified in clause 11.19 in each of the two preceding **disclosure years** of **RCP3**.

11.19 For the purposes of clause 0 to 11.18, to comply with the **measure of grid performance** GP2 assessment, **Transpower's** assessed value for five or more of the **point of service sub-category measures** for the **disclosure year** must not exceed the **point of service sub-category limit** specified for each of those **measure of grid performance GP2 point of service sub-categories** in Table 4.1.

11.20 For the purposes of clauses 11.14 and 11.19, **Transpower's** assessed value for **point of service sub-category measure** GP2A for a **disclosure year** is calculated in accordance with the formula:

GP2A assessed value = the sum of the **duration** of all **unplanned interruptions** for the **point of service sub-category measure** GP2A commencing within the **disclosure year** divided by the total number of **unplanned interruptions** for the **point of service sub-category measure** GP2A commencing within the **disclosure year**.

11.21 For the purposes of clauses 11.14 and 11.19., **Transpower's** assessed value for **point of service sub-category measure** GP2B for a **disclosure year** is calculated in accordance with the formula:

GP2B assessed value = the sum of the **duration** of all **unplanned interruptions** for the **point of service sub-category measure** GP2B commencing within the **disclosure year** divided by the total number of **unplanned interruptions** for the **point of service sub-category measure** GP2B commencing within the **disclosure year**.

- 11.22 For the purposes of clauses 11.14 and 11.19., **Transpower's** assessed value for **point of service sub-category measure** GP2C for a **disclosure year** is calculated in accordance with the formula:

GP2C assessed value = the sum of the **duration** of all **unplanned interruptions** for the **point of service sub-category measure** GP2C commencing within the **disclosure year** divided by the total number of **unplanned interruptions** for the **point of service sub-category measure** GP2C commencing within the **disclosure year**.

- 11.23 For the purposes of clauses 11.14 and 11.19., **Transpower's** assessed value for **point of service sub-category measure** GP2D for a **disclosure year** is calculated in accordance with the formula:

GP2D assessed value = the sum of the **duration** of all **unplanned interruptions** for **point of service sub-category measure** GP2D commencing within the **disclosure year** divided by the total number of **unplanned interruptions** for the **point of service sub-category measure** GP2D commencing within the **disclosure year**.

- 11.24 For the purposes of clauses 11.14 and 11.19., **Transpower's** assessed value for **point of service sub-category measure** GP2E for a **disclosure year** is calculated in accordance with the formula:

GP2E assessed value = the sum of the **duration** of all **unplanned interruptions** for the **point of service sub-category measure** GP2E commencing within the **disclosure year** divided by the total number of **unplanned interruptions** for the **point of service sub-category measure** GP2E commencing within the **disclosure year**.

- 11.25 For the purposes of clauses 11.14 and 11.19., **Transpower's** assessed value for **point of service sub-category measure** GP2F for a **disclosure year** is calculated in accordance with the formula:

GP2F assessed value = the sum of the **duration** of all **unplanned interruptions** for the **point of service sub-category measure** GP2F commencing within the **disclosure year** divided by the total number of **unplanned interruptions** for the **point of service sub-category measure** GP2F commencing within the **disclosure year**.

*Compliance with AP1 quality standard*

- 11.26 For each **disclosure year**, **Transpower** must comply with the **asset performance measure** AP1 quality standard as specified in clause 11.27.
- 11.27 For the purpose of clause 11.26, to comply with the asset performance AP1 quality standard, **Transpower's HVDC** energy availability for the **HVDC poles 2 and 3** for the **disclosure year** as calculated in accordance with clause 11.28 must be higher than the AP1 quality standard value in Table 4.2.



- 11.28 For the purposes of clause 11.27, subject to clause 11.29, the **HVDC** energy availability for the **HVDC poles** 2 and 3 for the **disclosure year** is calculated as a percentage term in accordance with the formula:

$$100 - \frac{100 \sum_{j=0}^N (\text{reduction in capacity due to } \mathbf{outage} \ j) (\text{duration of } \mathbf{outage} \ j \text{ in hours})}{(\text{maximum capacity of } \mathbf{HVDC poles}) (\text{total number of hours in the } \mathbf{disclosure year})}$$

where:

$j$  is the **outage** that reduced capacity of the **HVDC pole(s)** in the **disclosure year**

$N$  is the total number of **outages** associated with the **HVDC poles**

- 11.29 For the purposes of clause 11.27, for a maximum of 3 **disclosure years** of **RCP3** during the life of **Project k**, the **Project k** adjustment may be added to the **HVDC** energy availability for the **HVDC poles** 2 and 3 calculated in accordance with clause 11.28, where the **Project k** adjustment for each **disclosure year** is calculated in accordance with the formula:

**Project k** adjustment = the lessor of (0.07 or  $p$ )

where:

$$p = 100 \frac{(\text{reduction in capacity due to } \mathbf{Project k} \text{ related } \mathbf{outages}) (\text{duration of } \mathbf{Project k} \text{ outage hours})}{(\text{maximum capacity of } \mathbf{HVDC poles}) (\text{total number of hours in the } \mathbf{disclosure year})}$$

#### *Compliance with AP2 quality standard*

- 11.30 For each **disclosure year**, **Transpower** must comply with the **asset performance measure** AP2 quality standard as specified in clause 11.31.
- 11.31 For the purpose of clause 11.30, to comply with the asset performance AP2 quality standard, **Transpower's** average percentage of the time that the **HVAC** circuits listed in Schedule G are available during the **disclosure year** as calculated in accordance with clause 11.32 must be higher than the AP2 quality standard value in Table 4.2.
- 11.32 For the purposes of clause 11.31, the average percentage of the time that the **HVAC** circuits are available during the **disclosure year** is calculated as a percentage term in accordance with the formula:

$$100 - \frac{100(\text{total duration (in hours) of all } \mathbf{outages} \text{ on the } \mathbf{HVAC} \text{ circuits listed in Schedule G})}{(\text{number of } \mathbf{HVAC} \text{ circuits listed in Schedule G}) (\text{total number of hours in the } \mathbf{disclosure year})}$$

**Table 4.1: Measures of grid performance for grid output targets, caps, collars, point of service sub-category limits and grid output incentive rates for revenue-linked grid output measures**

Point of service sub-category	Cap	Grid output target	Collar	Point of service sub-category limit	Grid output Incentive rate
<b>GP1: number of interruptions (per annum)</b>				\$ per event	
GP1A: N-1 security high economic consequence	0	7	14	14	421,429
GP1B: N-1 security material economic consequence	7	24	41	41	50,000
GP1C: N security high economic consequence	4	6	8	8	325,000
GP1D: N security material economic consequence	9	23	37	37	53,571
GP1E: N-1 security generator	5	9	13	13	62,500
GP1F: N security generator	6	12	18	18	41,667
<b>GP2: average duration of interruption (min)</b>				\$ per min	
GP2A: N-1 security high economic consequence	30	92	154	154	47,581
GP2B: N-1 security material economic consequence	36	61	86	86	34,000
GP2C: N security high economic consequence	0	103	206	206	6311
GP2D: N security material economic consequence	0	140	280	280	5,357
GP2E: N-1 security generator	50	174	298	298	2,016
GP2F: N security generator	11	93	175	175	3,049

**Table 4.2: Asset performance measures grid output targets, caps, collars, quality standards and grid output incentive rates for revenue-linked grid output measures**

Asset performance measure	Cap	Grid output target	Collar	Quality standard	Grid output Incentive rate
<b>AP1: HVDC availability (%)</b>					\$ per 1%
HVDC availability	99.75	98.75	97.75	96.75	350,000
<b>AP2: HVAC availability (%)</b>					\$ per 1%
HVAC availability (71 selected assets)	99.2	99.0	98.8	98.6	3,500,000

12. The grid output adjustment

12.1 **Transpower** must calculate the **grid output adjustment** for each **disclosure year** for the **revenue-linked grid output measures**.

12.2 For **measures of grid performance** GP1 and GP2 and **asset performance measures** AP1 and AP2, the **grid output target, cap, collar, and grid output incentive rate** in Table 4.1 and Table 4.2 apply.

12.3 For the purposes of calculating the **grid output adjustment**, the output achieved is:

12.3.1 for each of the **point of service sub-category measures** GP1A, GP1B, GP1C, GP1D, GP1E and GP1F, the total number of all **unplanned interruptions** in the **disclosure year**;

12.3.2 for each of the **point of service sub-category measures** GP2A, GP2B, GP2C, GP2D, GP2E and GP2F, the sum of the **durations** of all **unplanned interruptions** in the **disclosure year** divided by the total number of **unplanned interruptions** in the **disclosure year**;

12.3.3 for **asset performance measure** AP1, subject to clause 12.3.4, the **HVDC** energy availability for the **HVDC poles 2 and 3** is calculated as a percentage term in the following manner:

$$100 - \frac{100 \sum_{j=0}^N (\text{reduction in capacity due to } \mathbf{outage } j) (\text{duration of } \mathbf{outage } j \text{ in hours})}{(\text{maximum capacity of } \mathbf{HVDC poles}) (\text{total number of hours in the } \mathbf{disclosure year})}$$

where:

$j$  is the **outage** that reduced capacity of the **HVDC pole(s)** in the **disclosure year**

$N$  is the total number of **outages** associated with the **HVDC poles**; and

12.3.4 For the purposes of clause 12.3.3, for a maximum of 3 **disclosure years** of **RCP3** during the life of **Project k**, the **Project k** adjustment may be added to the **HVDC** energy availability for the **HVDC poles 2** and **3** calculated in accordance with clause 12.3.3, where the **Project K** adjustment for each **disclosure year** is calculated in accordance with the formula:

**Project k** adjustment = the lessor of (0.07 or p)

where:

$$p = 100 \frac{(\text{reduction in capacity due to } \mathbf{Project\ k\ related\ outages})(\text{duration of } \mathbf{Project\ k\ outage\ hours})}{(\text{maximum capacity of } \mathbf{HVDC\ poles})(\text{total number of hours in the } \mathbf{disclosure\ year})}$$

12.3.5 for **asset performance measure AP2**, the percentage term calculated as:

$$100 - \frac{100(\text{total duration (in hours) of all } \mathbf{outages\ on\ the\ HVAC\ circuits\ listed\ in\ Schedule\ G})}{(\text{number of } \mathbf{HVAC\ circuits\ listed\ in\ Schedule\ G})(\text{total number of hours in the } \mathbf{disclosure\ year})}$$

### 13. Performance measures not linked to revenue

13.1 The performance measures not linked to revenue are the:

13.1.1 **measure of grid performance GP-M**, which measures reliability through the number of **momentary interruptions**. Performance is assessed each **disclosure year** against the quality standard specified in clause 14.2 and the reporting required under clauses 16, and 20.5.

13.1.2 **asset performance measure AP3**, which measures the extent to which **Transpower** meets estimated return to service times for planned **outages** of the **HVAC** circuits set out in Schedule G. Performance is assessed each **disclosure year** against the reporting required under clause 18.1.2.

13.1.3 **asset performance measure AP4**, which measures the extent to which **Transpower** communicates delays to affected parties of planned **outage** return to service times of the **HVAC** circuits set out in Schedule G. Performance is assessed each **disclosure year** with the reporting required under clause 18.1.3.

13.1.4 **asset performance measure AP5**, which measures the extent that **Transpower** has placed **customers** on **N-security** of supply. Performance is assessed each **disclosure year** with the reporting required under clause 18.1.4.

13.1.5 **customer service measure CS1**, which relates to the timeliness of post-**interruption** event communication and information provided to affected **customers**. Performance is assessed each **disclosure year** through an event survey with affected **customers** following the event as described in clause 18.1.5.

13.1.6 **asset health measure AH**, which measures the percentage of assets with **AHI** of 8 or greater (assets in poor or very poor condition) in each **asset health measure asset class**. Performance is assessed each **disclosure year** against the quality standards described in clauses 14.3 to 14.9 and the reporting required under clauses 16.2.4(k) and 20.8.

14. Quality standards not linked to revenue

14.1 For each **disclosure year**, **Transpower** must comply with the **measure of grid performance GP-M** quality standard specified in clause 14.2.

14.2 For the purposes of clause 14.1, to comply with the **measure of grid performance GP-M** quality standard, **Transpower** must not have more than 116 **momentary interruptions** in the **disclosure year**.

14.3 For each **disclosure year**, **Transpower** must comply with the **asset health measure AH** quality standard for each **asset health measure asset class** described in clauses 14.4 to 14.9 and Table 4.3.

14.4 For the purposes of clause 14.3, to comply with the asset health quality standard, **Transpower's** assessed value for each **asset health measure asset class** must not be higher than the quality standard specified for that **asset health measure asset class** in Table 4.3.

14.5 For the purposes of clause 14.4, **Transpower's** assessed value for tower grillage foundation for each **disclosure year** is calculated in accordance with the formula:

Tower grillage foundation assessed value =

$$\frac{\text{the sum of all tower grillage foundation assets with an AHI of 8 or higher}}{\text{the sum of all tower grillage foundation assets}} \times 100$$

14.6 For the purposes of clause 14.4, **Transpower's** assessed value for tower protective coating for each **disclosure year** is calculated in accordance with the formula:

Tower protective coating assessed value =

$$\frac{\text{the sum of all tower protective coating assets with an AHI of 8 or higher}}{\text{the sum of all tower protective coating assets}} \times 100$$

14.7 For the purposes of clause 14.4, **Transpower's** assessed value for insulators for each **disclosure year** is calculated in accordance with the formula:

Insulators assessed value =

$$\frac{\text{the sum of all insulator assets with an AHI of 8 or higher}}{\text{the sum of all insulator assets}} \times 100$$

- 14.8 For the purposes of clause 14.4, **Transpower's** assessed value for power transformers for each **disclosure year** is calculated in accordance with the formula:

Power transformers assessed value =

$$\frac{\text{the sum of all power transformer assets with an AHI of 8 or higher}}{\text{the sum of all power transformer assets}} \times 100$$

- 14.9 For the purposes of clause 14.4, **Transpower's** assessed value for outdoor circuit breakers for each **disclosure year** is calculated in accordance with the formula:

Outdoor circuit breakers value =

$$\frac{\text{the sum of all outdoor circuit breaker assets with an AHI of 8 or higher}}{\text{the sum of all outdoor circuit breaker assets}} \times 100$$

**Table 4.3: Quality standards for each asset health measure asset class by disclosure year**

<b>Asset health measure asset class</b>	<b>2020/ 2021 (%)</b>	<b>2021/ 2022 (%)</b>	<b>2022/ 2023 (%)</b>	<b>2023/ 2024 (%)</b>	<b>2024/ 2025 (%)</b>
<b>Tower grillage foundation</b>	7.11	8.17	8.22	7.89	9.47
<b>Tower protective coating</b>	5.77	6.81	8.09	8.94	9.96
<b>Insulators</b>	1.55	3.35	5.59	7.96	10.36
<b>Power transformers</b>	3.22	3.68	5.37	8.65	12.03
<b>Outdoor circuit breakers</b>	2.00	2.37	5.65	7.63	8.27

## Part 5: Compliance and information reporting

### 15. Pricing compliance statement

- 15.1 No later than five **working days** after **Transpower** announces, or amends, its forecast **HVAC revenue** or forecast **HVDC revenue** for the purpose of setting or resetting charges under the **TPM** for a **pricing year**, **Transpower** must:

15.1.1 provide to the **Commission** a written statement (the **pricing compliance statement**); and

15.1.2 **publicly disclose** the **pricing compliance statement**.

- 15.2 The **pricing compliance statement** must:

15.2.1 state whether or not **Transpower** has complied with the price path in Part 3 for the **pricing year**;

- 15.2.2 include any information reasonably necessary to demonstrate whether **Transpower** has complied with the price path in Part 3 for the **pricing year**, including but not limited to a summary of forecast total revenues applied in the **TPM** for the **pricing year**;
- 15.2.3 state the date on which the **pricing compliance statement** was prepared; and
- 15.2.4 include a certificate in the form set out in Schedule J signed by at least two **directors** of **Transpower**.

16. Annual compliance statement

- 16.1 No later than 80 **working days** from the end of each **disclosure year**, **Transpower** must:
  - 16.1.1 provide to the **Commission** a written statement (the **annual compliance statement**); and
  - 16.1.2 **publicly disclose** the **annual compliance statement** and accompanying **independent assurance report**.
- 16.2 The **annual compliance statement** must:
  - 16.2.1 state whether or not **Transpower** has:
    - (a) complied with the price path in Part 3 for the **disclosure year**;
    - (b) complied with the quality standards in Part 4;
    - (c) complied with the requirement to publicly disclose, in accordance with the **ID determination**, its annual **grid output adjustment** calculation for the **disclosure year**, including the values for 'm' calculated in accordance with Schedule B, clause B2(1) of the **Capex IM**;
    - (d) complied with requirements related to **grid output adjustment** calculations and **public disclosure**; and
    - (e) complied with requirements related to wash-up calculations and **public disclosure**;
  - 16.2.2 provide the information reasonably necessary to demonstrate compliance with the price path in Part 3 and quality standards in Part 4;
  - 16.2.3 if **Transpower** has not complied with the price path in Part 3 or any quality standards in Part 4, disclose:
    - (a) each requirement and standard that is not complied with; and
    - (b) the reasons for non-compliance in each case;

- 16.2.4 include, information on performance against the following performance measures:
- (a) for **measure of grid performance GP1**: the assessed value and the **point of service sub-category** limit for each **point of service sub-category** for the **disclosure year**;
  - (b) for **measure of grid performance GP1**: the **cap** and **grid output target** for each **point of service sub-category** for the **disclosure year**;
  - (c) for **measure of grid performance GP2**: the assessed value and the **point of service sub-category** limit for each **point of service sub-category** for the **disclosure year**;
  - (d) for **measure of grid performance GP2**: the **cap** and **grid output target** for each **point of service sub-category** for the **disclosure year**;
  - (e) for **measure of grid performance GP-M**: the quality standard for the **disclosure year**;
  - (f) for **measure of grid performance GP-M**: the number of **momentary interruptions** for the **disclosure year**;
  - (g) for **asset performance measure AP1**: **Transpower's HVDC** energy availability for the **HVDC poles 2 and 3** for the **disclosure year** and the quality standard for the **disclosure year**;
  - (h) for **asset performance measure AP1**: the **cap, collar** and **grid output target** for the **disclosure year**;
  - (i) for **asset performance measure AP2**: the average percentage of the time that **Transpower's HVAC** circuits listed in Schedule G are available during the **disclosure year** and the quality standard for the **disclosure year**;
  - (j) for **asset performance measure AP2**: the **cap, collar** and **grid output target** for the **disclosure year**;
  - (k) for **asset health measure AH**: the assessed value and quality standard for each **asset health measure asset class** for the **disclosure year**;
- 16.2.5 state the date on which the **annual compliance statement** was prepared;
- 16.2.6 include a certificate in the form set out in Schedule K, signed by at least two **directors of Transpower**; and
- 16.2.7 be accompanied by an **independent assurance report** procured and prepared in accordance with clause 30.



17. Annual compliance statement – information required

17.1 The **annual compliance statement** for a **disclosure year** must include:

- 17.1.1 the **ex-post economic gain or loss** (including for each of **HVAC** and **HVDC**) for the **disclosure year**, calculated in accordance with clause 24.1 and Schedule E, including any supporting information;
- 17.1.2 the **forecast SMAR** used for the **relevant pricing year**;
- 17.1.3 the **HVAC transmission revenue** for the **relevant pricing year**;
- 17.1.4 the **HVDC transmission revenue** for the **relevant pricing year**;
- 17.1.5 a description and explanation of any voluntary revenue reduction **Transpower** has made in calculating the **ex-post economic gain or loss** for the **disclosure year**;
- 17.1.6 where applicable, the proposed update of any **forecast SMAR** that is calculated in accordance with clause 25 and Schedule D, including any supporting information;
- 17.1.7 a description and explanation of the calculation method and key assumptions applied by **Transpower** when calculating a proposed update of a **forecast SMAR**, including any variations from the calculation method and key assumptions used for the purposes of proposed updates of any **forecast SMAR** in any previous **disclosure year**;
- 17.1.8 a description and explanation of any voluntary revenue reductions that **Transpower** seeks to apply when setting charges under the **TPM** for any future **pricing year**;
- 17.1.9 where applicable, an updated summary of the **forecast MAR** and the **forecast SMAR** as set out in Schedule A;
- 17.1.10 an updated summary of the **EV account** as set out in Schedule B, and is supported by the further information required in clause 27.1, where the **EV account entries** are calculated in accordance with clause 27.2;
- 17.1.11 a summary of **pass-through costs** and **recoverable costs** as set out in Schedule H, including:
  - (a) the **pass-through costs** and **recoverable costs** recovered by **Transpower** from **customers** as part of its revenue for the **relevant pricing year**;
  - (b) the **pass-through costs** and **recoverable costs** of **Transpower** during the **disclosure year**;
  - (c) a description and explanation of any **operating costs** incurred as part of a **major capex project**;

- (d) a summary of the prudent net additional **operating costs** incurred in responding to a **catastrophic event**;
- (e) a description and explanation of any voluntary revenue reduction **Transpower** has made in calculating the **recoverable costs** recovered by **Transpower** from **customers** as part of its revenue for the **relevant pricing year**; and
- (f) an explanation for the **opex incentive amount** for the **disclosure year**;

17.1.12 updated summaries of the approved **base capex** as set out in Schedule C1 and Schedule C2; and

17.1.13 details of any changes to **Transpower's** policy of hedging **capital expenditure** during the **disclosure year**.

## 18. Information to accompany the annual compliance statement

18.1 **Transpower** must **publicly disclose** the following additional information at the same time as its **annual compliance statement** for the following performance measures:

18.1.1 **asset performance measures** AP1 and AP2 – identify where the **grid output measure** is outside the **cap** or **collar** of the incentive range and the main reasons for this;

18.1.2 **asset performance measure** AP3 – identify those circuits in Schedule G that are returned to service two or more hours after **Transpower's** estimated return to service time, including:

- (a) when this has occurred;
- (b) the impact on affected parties, including the market, if applicable; and
- (c) the steps **Transpower** took to inform affected parties and the market;

18.1.3 **asset performance measure** AP4 – for circuits in Schedule G, the percentage of time that **Transpower** gives 1.5 hours or more notice to the market in the event assets are going to be returned to service later than the original planned return to service time;

18.1.4 **asset performance measure** AP5 – the extent that **Transpower** has placed **customers** on N security of supply, including:

- (a) when this has occurred;
- (b) how long **customers** were reduced to N security of supply;
- (c) the level of demand at the **grid** exit point(s) affected by the reduced N security of supply; and

(d) the steps **Transpower** took to inform affected **customers**;

18.1.5 **customer service measure CS1** – the results of post-**interruption** event surveys of **customers** affected by **interruptions**.

19. Periodic reporting for performance events

19.1 For each **unplanned interruption** during a **disclosure year** which lasts 12 hours or more, **Transpower** must **publicly disclose** within 42 **working days** of the **unplanned interruption**:

19.1.1 the cause of the **unplanned interruption**;

19.1.2 the start date and time of the **unplanned interruption**;

19.1.3 the end date and time of the **unplanned interruption**;

19.1.4 the megawatts affected by the **unplanned interruption**;

19.1.5 the **grid** exit point(s) and **grid** injection point(s) affected by the **unplanned interruption**;

19.1.6 actions **Transpower** took to minimise the effect of the **unplanned interruption**; and

19.1.7 lessons **Transpower** has learned as a result of the **unplanned interruption**.

19.2 For each **interruption** during a **disclosure year** over one system minute, **Transpower** must **publicly disclose** within 42 **working days** of the **interruption**:

19.2.1 the cause of the **interruption**;

19.2.2 the start date and time of the **interruption**;

19.2.3 the end date and time of the **interruption**;

19.2.4 the megawatts affected by the **interruption**;

19.2.5 the **grid** exit point(s) and **grid** injection point(s) affected by the **interruption**;

19.2.6 actions **Transpower** took to minimise the effect of the **interruption**; and

19.2.7 lessons **Transpower** has learned as a result of the **interruption**.

20. Annual reporting for performance events

20.1 **Transpower** must **publicly disclose** a report by an **engineer** at the time of providing its **annual compliance statement** for a **disclosure year** where **Transpower** has not complied with any of the following quality standards:

20.1.1 **measure of grid performance GP1**, where the quality standard is specified in clauses 11.3 to 11.6;

- 20.1.2 **measure of grid performance** GP2, where the quality standard is specified in clauses 11.15 to 11.19;
  - 20.1.3 **asset performance measure** AP1, where the quality standard is specified in clause 11.26; and
  - 20.1.4 **asset performance measure** AP2, where the quality standard is specified in clause 11.30.
- 20.2 For the purposes of clause 20.1, the report must include:
- 20.2.1 the cause or causes of the non-compliance with the quality standards;
  - 20.2.2 descriptions of the failure events and other contributory factors that led to the non-compliance with quality standards;
  - 20.2.3 the outcome of any impact reviews undertaken by Transpower on each failure event relating to **customers** or **consumers** who are directly or indirectly consuming **electricity lines services**;
  - 20.2.4 what actions were undertaken by **Transpower** to prevent or mitigate similar events or contributing factors in the future; and
  - 20.2.5 state the **engineer's** opinion on whether the non-compliance with quality standards indicates there is need for **Transpower** to take further action in respect of **Transpower's**:
    - (a) asset management practices;
    - (b) knowledge of the condition of its assets; and
    - (c) prioritisation of its **projects**;
- 20.3 **Transpower** must **publicly disclose** at the same time as its **annual compliance statement** a summary of all reports **publicly disclosed** under clause 19.1 for the **disclosure year**.
- 20.4 **Transpower** must **publicly disclose** at the same time as its **annual compliance statement** a summary of all reports **publicly disclosed** under clause 19.2 for the **disclosure year**.
- 20.5 Where **Transpower** has not complied with the **measure of grid performance** GP-M in accordance with clauses 14.1, it must **publicly disclose** at the same time as its **annual compliance statement**:
- 20.5.1 the cause of each **momentary interruption**;
  - 20.5.2 the start date and time of each **momentary interruption**;
  - 20.5.3 the end date and time of each **momentary interruption**;
  - 20.5.4 the megawatts affected by each **momentary interruption**; and

- 20.5.5 the **grid** exit point(s) and **grid** injection point(s) affected by each **momentary interruption**.
- 20.6 Where **Transpower's asset performance measure** AP1 is lower than the **collar** specified in Table 4.2, as calculated in accordance with clauses 11.28 and 11.29, it must **publicly disclose** at the same time as its **annual compliance statement**:
- 20.6.1 the events that caused **Transpower** to go below the **collar**;
- 20.6.2 reasons for **Transpower** going below the **collar**;
- 20.6.3 the impact on **Transpower's customers** for the events mentioned in clause 20.6.1;
- 20.6.4 actions **Transpower** has taken to minimise the effect of the events mentioned in clause 20.6.1; and
- 20.6.5 lessons **Transpower** has learned as a result of going below the **collar**.
- 20.7 Where **Transpower's asset performance measure** AP2 is lower than the **collar** specified in Table 4.2, as calculated in accordance with clause 11.32, it must **publicly disclose** at the same time as its **annual compliance statement**:
- 20.7.1 the events that caused **Transpower** to go below the **collar**;
- 20.7.2 reasons for **Transpower** going below the **collar**;
- 20.7.3 the impact on **Transpower's customers** for the events mentioned in clause 20.7.1;
- 20.7.4 actions **Transpower** has taken to minimise the effect of the events mentioned in clause 20.7.1; and
- 20.7.5 lessons **Transpower** has learned as a result of going below the **collar**.
- 20.8 Where **Transpower** has not complied with the asset health quality standard for an **asset health measure asset class**, as specified in clause 14.3, it must **publicly disclose** at the same time as its **annual compliance statement**:
- 20.8.1 reasons for not meeting the quality standard and supporting evidence for those reasons; and
- 20.8.2 measures that have been put in place to prevent future non-compliance with the quality standard.
21. Asset health initiatives reporting
- 21.1 **Transpower** must **publicly disclose** a plan for developing asset and network risk modelling for **RCP3** by 1 October 2020.

- 21.2 For the **disclosure year** from 1 July 2021 to 30 June 2022, **Transpower** must **publicly disclose** a report from an independent expert on asset management in accordance with terms of reference which are to be proposed by **Transpower** at the same time as its **annual compliance statement** for **disclosure year** from 1 July 2020 to 30 June 2021 and approved by the **Commission**.
- 21.3 For the purposes of clause 21.2, the expert report must set out an assessment against **good electricity industry practice** of **Transpower's** progress towards implementing:
- 21.3.1 the further development of its asset health modelling, where this has not yet been sufficiently and reasonably developed in each asset health measure asset class;
- 21.3.2 the further development of its risk-based decision-making frameworks to enable **grid** investment decision-making to be informed by risk during **RCP3** and in preparation for the period following **RCP3**; and
- 21.3.3 asset life-extension models where these were identified as not yet being considered sufficient.
- 21.4 **Transpower** must **publicly disclose** at the same time as providing its **annual compliance statement** for each **disclosure year**, a report on how **Transpower** would have performed on asset health, had the asset health been **revenue-linked grid output measures** as proposed in its **RCP3 proposal**.
22. Customer engagement reporting
- 22.1 **Transpower** must report for each **disclosure year**, at the same time as providing its **annual compliance statement**, on the extent and effectiveness of its consultations with **customers** and others in relation to new **base capex projects**.
- 22.2 For the purposes of clause 22.1, the report must include, without limitation:
- 22.2.1 whether and how **Transpower** consulted with **customers** and others; and
- 22.2.2 the matters included in the consultations.
- 22.3 **Transpower** must **publicly disclose** a **customer** engagement plan for **RCP3** by 1 October 2020, with the high-level scope of the plan to be proposed by **Transpower** and provided to the **Commission** for approval.
- 22.4 For the purposes of clause 22.3, the high-level plan must be of sufficient quality to be approved by the **Commission** not later than 1 July 2020.
- 22.5 For the **disclosure year** from 1 July 2021 to 30 June 2022, **Transpower** must **publicly disclose** with its **annual compliance statement** the results of a review by an independent expert in the field of customer engagement on its proposed engagement process or processes leading up to preparation and submission of its proposal for the next **regulatory period**, where the results of the review must set out the qualifications of the independent expert in the field of **customer** engagement.

23. Annual cost estimation reporting

- 23.1 Subject to clause 23.3, **Transpower** must **publicly disclose**, with its **annual compliance statement**, a post-**project** review for the **disclosure year** in respect of completed significant **capex projects**, including, without limitation:
- 23.1.1 the variance between the actual **project** costs and the cost estimates for those **projects** in **Transpower's** various **capital expenditure** proposals in **RCP3 base capex projects**, for **RCP2** and **RCP3 listed projects**, and for all **major capex projects**;
- 23.1.2 an assessment of the extent to which each **project** met the relevant measures of success established by **Transpower** prior to starting work on that **project**; and
- 23.1.3 a detailed narrative explaining the reasons for the cost variance on **projects** that varied +/-30% from their cost estimate.
- 23.2 For the purposes of clause 23.1:
- 23.2.1 'cost estimate' for a **project** refers to the amount **Transpower** initially proposed in its **RCP3 proposal**, its **listed project** proposal for that **project**, or the **major capex proposal** for that **project**, whichever is relevant; and
- 23.2.2 the threshold for considering a **project** a 'significant **project**' is that the **directors** of **Transpower** had initially been involved in approving the **project**.
- 23.3 For the purposes of complying with clause 23.1:
- 23.3.1 **Transpower** may propose to the **Commission**, for its determination, that certain information is commercially sensitive and should be held by the **Commission** in confidence; and
- 23.3.2 the **Commission** may determine what part, if any, of the information provided to the **Commission** as commercially sensitive may be held in confidence by the **Commission** and does not need to be **publicly disclosed**.

24. Wash-up building blocks calculation

- 24.1 For the purposes of annually calculating the **ex-post economic gain or loss**, **Transpower** must use:
- 24.1.1 the approach and formulae specified in Schedule E;
- 24.1.2 the **opening RAB value**;
- 24.1.3 the actual amounts by month of **commissioning** in the **disclosure year** for **value of commissioned asset** of approved **base capex** and **major capex**;
- 24.1.4 the **WACC**;

24.1.5 **depreciation**, including any capitalised interest **depreciation** adjustments required to align **Transpower's** cost of financing on its **works under construction** with the requirements of clause 2.2.7(2) of the **Transpower IM**;

24.1.6 the **opex allowance**, excluding capitalised operating lease payments, being:

- (a) for the **disclosure year** from 1 July 2020 to 30 June 2021, \$264.8 million;
- (b) for the **disclosure year** from 1 July 2021 to 30 June 2022, \$269.2 million;
- (c) for the **disclosure year** from 1 July 2022 to 30 June 2023, \$278.9 million;
- (d) for the **disclosure year** from 1 July 2023 to 30 June 2024, \$288.1 million; and
- (e) for the **disclosure year** from 1 July 2024 to 30 June 2025, \$288.3 million;

24.1.7 the forecast **pass-through costs** set out in clause 25.1.2(i);

24.1.8 the forecast **recoverable costs** set out in clause 25.1.2(j);

24.1.9 the **corporate tax rate**;

24.1.10 the **regulatory tax allowance** calculated:

- (a) by applying the **tax rules** and **corporate tax rate** to the regulatory profit/(loss) before tax in accordance with Part 2, Subpart 3 of the **Transpower IM**;
- (b) using the **term credit spread differential allowance** calculated in accordance with Part 2, Subpart 4 of the **Transpower IM**; and
- (c) using as the amount of regulatory profit/(loss) before tax for the purpose of this calculation, the sum of:
  - (i) the regulatory profit/(loss) before tax disclosed by **Transpower** for the **disclosure year** in accordance with the **ID determination**; and
  - (ii) the **term credit spread differential allowance** calculated in subclause (b);

24.1.11 the **term credit spread differential allowance**;

24.1.12 for actual revenues received by **Transpower**:

- (a) the **actual transmission revenue** received in the **relevant pricing year**; and



- (b) the sum of **other regulated income** received in the **disclosure year**;
  - 24.1.13 the **EV adjustments** recovered through the **forecast SMAR** for the **relevant pricing year**;
  - 24.1.14 the actual **pass-through costs** and **recoverable costs** calculated in accordance with Schedule H; and
  - 24.1.15 any voluntary reduction in **actual transmission revenue** made by **Transpower** for the **disclosure year**.
- 24.2 For the purposes of any disparity adjustments for calculating the **ex-post economic gain or loss** in clause 24.1, the **forecast CPI** that applied when the **opex allowance** was determined is:
- 24.2.1 for the **disclosure year** from 1 July 2020 to 30 June 2021, 1.90%;
  - 24.2.2 for the **disclosure year** from 1 July 2021 to 30 June 2022, 2.10%;
  - 24.2.3 for the **disclosure year** from 1 July 2022 to 30 June 2023, 2.07%;
  - 24.2.4 for the **disclosure year** from 1 July 2023 to 30 June 2024, 2.03%; and
  - 24.2.5 for the **disclosure year** from 1 July 2024 to 30 June 2025, 2.00%.
25. Transpower to propose update of forecast SMAR
- 25.1 **Transpower** must provide the following information when proposing an update of a **forecast MAR** and **forecast SMAR** for the purposes of clause 8.3 no later than 80 **working days** from the end of the relevant **disclosure year**:
- 25.1.1 an update of a **forecast MAR** and **forecast SMAR** for each remaining **pricing year** in **RCP3**, calculated in a manner consistent with the approach for calculating the **forecast SMAR** for the full period of **RCP3**, to take account of the incremental revenue effect of:
    - (a) forecast **major capex** approved by the **Commission** in the **disclosure year**;
    - (b) **base capex** approved by the **Commission** in the **disclosure year** relating to one or more of the **listed projects** in Schedule I; and
    - (c) an updated **EV adjustment** calculated for the building blocks **forecast MAR** in accordance with clauses 28.2 and 28.3.
  - 25.1.2 for the purposes of clause 25.1.1, the calculation of the update of a building blocks **forecast MAR** used in calculating the update of the **forecast SMAR** must, where applicable, use:
    - (a) the approach and formulae specified in Schedule D;
    - (b) the forecast **opening RAB value**;

- (c) the forecast amounts by month of **commissioning** in the **disclosure year** for **value of commissioned asset** of approved **base capex** and **major capex**;
- (d) the **base capex allowance** in accordance with Schedule C1;
- (e) the **WACC**;
- (f) forecast **depreciation**, including a forecast of any capitalised interest **depreciation** adjustment required to align **Transpower's** cost of financing on its **works under construction** with the requirements of clause 2.2.7(2) of the **Transpower IM**;
- (g) the forecast **regulatory tax allowance** calculated:
  - (i) by applying the **tax rules** and **corporate tax rate** to the forecast regulatory profit/(loss) before tax in accordance with Part 2, Subpart 3 of the **Transpower IM**;
  - (ii) using the **term credit spread differential allowance** calculated in accordance with Part 3, Subpart 5 of the **Transpower IM**; and
  - (iii) using as the amount of forecast regulatory profit/(loss) before tax for the purpose of this calculation, the sum of:
    - (A) the forecast of the regulatory profit/(loss) before tax calculated using the calculation basis required for disclosure under the **ID determination**; and
    - (B) the forecast of the **term credit spread differential allowance** calculated in accordance with Part 3, Subpart 5 of the **Transpower IM**;
- (h) the forecast **EV adjustments** specified in clauses 28.1.1 to 28.1.5, adjusted, where applicable, in accordance with clause 25.1.1(c);
- (i) the forecast **pass-through costs**, being:
  - (i) for the **disclosure year** from 1 July 2020 to 30 June 2021, \$16.2 million;
  - (ii) for the **disclosure year** from 1 July 2021 to 30 June 2022, \$16.5 million;
  - (iii) for the **disclosure year** from 1 July 2022 to 30 June 2023, \$16.8 million;
  - (iv) for the **disclosure year** from 1 July 2023 to 30 June 2024, \$17.1 million; and

- (v) for the **disclosure year** from 1 July 2024 to 30 June 2025, \$17.5 million;
  - (j) the forecast **recoverable costs**, being:
    - (i) for the **disclosure year** from 1 July 2020 to 30 June 2021, \$30.7 million;
    - (ii) for the **disclosure year** from 1 July 2021 to 30 June 2022, \$25.8 million;
    - (iii) for the **disclosure year** from 1 July 2022 to 30 June 2023, \$18.3 million;
    - (iv) for the **disclosure year** from 1 July 2023 to 30 June 2024, \$23.9 million; and
    - (v) for the **disclosure year** from 1 July 2024 to 30 June 2025, \$25.1 million; and
  - (k) the **opex allowance** set out in clause 24.1.6.
- 25.2 The calculation of an update of the **forecast SMAR**, must, where applicable, use:
- 25.2.1 the update of the building blocks **forecast MAR** calculated in accordance with clause 25.1.2;
  - 25.2.2 the conversion of the updated **forecast MAR** for **RCP3** to **forecast SMAR**, where the updated present value of the **forecast SMAR** for **RCP3** must equal the present value of the updated building blocks **forecast MAR**, determined using the **WACC**, and the **forecast SMAR** follows a trend equivalent to the **IPP revenue growth rate**;
  - 25.2.3 **IPP revenue growth rates** for each **pricing year** of **RCP3** of:
    - (a) For **HVAC**, 1%; and
    - (b) For **HVDC**, -1%.
- 25.3 For the purposes of determining the revenue impact of **major capex** or of **base capex** approved by the **Commission** relating to **listed projects**, **Transpower** must:
- 25.3.1 identify each **major capex project** approved by the **Commission** in the **disclosure year** if **project** assets are forecast to be **commissioned** during the period from 1 July 2020 to 30 June 2025;
  - 25.3.2 identify each **listed project** for which **base capex** is approved by the **Commission** in the **disclosure year** if **project** assets are forecast to be **commissioned** during the period from 1 July 2020 to 30 June 2025; and

25.3.3 for each **project** identified in accordance with subclauses 25.3.1 and 25.3.2, separately detail:

- (a) the forecast date, or dates, that **project** assets are forecast to be **commissioned**; and
- (b) the incremental revenue impact of the forecast **commissioning** of **project** assets on each applicable future **forecast SMAR** and **forecast MAR**.

26. Listed projects

26.1 The **projects** or **programmes** identified as **listed projects** for **RCP3** are set out in Schedule I.

26.2 Notwithstanding clause 26.1, if at any time during **RCP3** a **project** or **programme** identified in Schedule I, ceases to be a **base capex project** or **base capex programme**, it is no longer a **listed project** for **RCP3**.

27. EV account summary

27.1 For the purposes of providing the information specified in clause 17.1.10 for the **disclosure year**, the updated summary of the **EV account** must show:

27.1.1 a reconciliation of the opening and closing balances of the **EV account** that takes into account:

- (a) the opening balance of the **EV account**;
- (b) the calculation of interest at the post-tax estimate corresponding to **WACC** on the opening balance of the **EV account**;
- (c) the allocation of **EV account entries** to the respective **HVAC** and **HVDC EV accounts** for **customers**; and
- (d) the **EV adjustments** made in the **forecast SMAR** in the **relevant pricing year**;

27.1.2 the forecast **EV account** balance at the end of **RCP3**, taking into account interest at the post-tax estimate corresponding to **WACC** on the forecast opening **EV account** balance for each **disclosure year**;

27.1.3 the source of calculation of the **EV account entries** referred to in subclause 27.1.1(c) for:

- (a) the **ex-post economic gain or loss** calculated for the final **disclosure year** of **RCP2**;
- (b) the after-tax gain or loss in respect of an **instrument that ceases to be an effective hedge** for the final **disclosure year** of **RCP2**;

- (c) the after-tax gain or loss in respect of a **commodity instrument that is not an effective hedge** for the final **disclosure year** of RCP2;
- (d) the **ex-post economic gain or loss** for the **disclosure year**;
- (e) the after-tax **gain or loss on capital expenditure commitments**;
- (f) the after-tax economic gain or loss of a **grid output adjustment**, calculated in accordance with Schedule B, clause B2(1) of the **Capex IM**;
- (g) the after-tax economic gain or loss of a **base capex expenditure adjustment**, calculated in accordance with Schedule B, clause B1(1) of the **Capex IM**;
- (h) the after-tax economic gain or loss of a **major capex expenditure and output adjustment**, calculated in accordance with Schedule B, clause B3(1) of the **Capex IM**; and
- (i) the after-tax amount of a **major capex sunk costs adjustment**, calculated in accordance with clause 3.3.7 of the **Capex IM**.

27.2 For the purposes of calculating **EV account entries**, **Transpower** must use:

27.2.1 the **major capex incentive rate**;

27.2.2 the **base capex standard incentive rate**;

27.2.3 the **base capex allowance** in accordance with Schedule C2:

- (a) for the **disclosure year** from 1 July 2020 to 30 June 2021, \$223.6 million;
- (b) for the **disclosure year** from 1 July 2021 to 30 June 2022, \$278.3 million;
- (c) for the **disclosure year** from 1 July 2022 to 30 June 2023, \$275.2 million;
- (d) for the **disclosure year** from 1 July 2023 to 30 June 2024, \$278.7 million; and
- (e) for the **disclosure year** from 1 July 2024 to 30 June 2025, \$282.6 million;

27.2.4 the **forecast CPI** used to determine the **base capex allowance** in subclause 27.2.3:

- (a) for the **disclosure year** from 1 July 2020 to 30 June 2021, 1.90%;
- (b) for the **disclosure year** from 1 July 2021 to 30 June 2022, 2.10%;
- (c) for the **disclosure year** from 1 July 2022 to 30 June 2023, 2.07%;

- (d) for the **disclosure year** from 1 July 2023 to 30 June 2024, 2.03%; and
- (e) for the **disclosure year** from 1 July 2024 to 30 June 2025, 2.00%;

27.2.5 the **forecast FX rate** used to determine the **base capex allowance** in subclause 27.2.3, for the conversion of US dollars to NZ dollars:

- (a) for the **disclosure year** from 1 July 2020 to 30 June 2021, 0.66;
- (b) for the **disclosure year** from 1 July 2021 to 30 June 2022, 0.66;
- (c) for the **disclosure year** from 1 July 2022 to 30 June 2023, 0.66;
- (d) for the **disclosure year** from 1 July 2023 to 30 June 2024, 0.66; and
- (e) for the **disclosure year** from 1 July 2024 to 30 June 2025, 0.66;

27.2.6 the **forecast FX rate** used to determine the **base capex allowance** in subclause 27.2.3, for the conversion of the following currencies to NZ dollars:

- (a) Euro: for each **disclosure year** in **RCP3**, 0.50;
- (b) British pound: for each **disclosure year** in **RCP3**, 0.47;
- (c) Australian dollar: for each **disclosure year** in **RCP3**, 0.91;
- (d) Japanese yen: for each **disclosure year** in **RCP3**, 73.40;
- (e) Swedish kroner: for each **disclosure year** in **RCP3**, 5.35; and
- (f) Canadian dollar: for each **disclosure year** in **RCP3**, 0.85; and

27.2.7 the amount of the **base capex allowance** to which the **forecast FX rate** applies for the purposes of determining the **base capex allowance** in subclause 27.2.3 is as set out in Table 5.1:

**Table 5.1: Amount of the base capex allowance (NZD million) to which the forecast FX rate applies**

Currency	2020/21	2021/22	2022/23	2023/24	2024/25
USD/NZD	14.6	13.4	8.3	6.5	5.6
EUR/NZD	3.7	3.3	3.8	3.3	2.9
GBP/NZD	-	-	-	-	-
AUD/NZD	0.6	0.2	0.2	0.3	0.1
JPY/NZD	0.0	0.0	0.0	0.0	0.0
SEK/NZD	0.7	0.7	0.8	0.9	1.2
CAD/NZD	-	-	-	-	-

## 28. Forecast EV adjustment

28.1 For the purposes of calculating an update of the building blocks **forecast MAR** for a **relevant pricing year**, and subject to clause 28.2, the **RCP3 forecast EV adjustments** applied in the initial **forecast MAR** in respect of the closing **EV account** balance for the final **disclosure year** of **RCP2** are:

28.1.1 for the **disclosure year** from 1 July 2020 to 30 June 2021, -\$21.1 million;

28.1.2 for the **disclosure year** from 1 July 2021 to 30 June 2022, -\$21.1 million;

28.1.3 for the **disclosure year** from 1 July 2022 to 30 June 2023, -\$21.1 million;

28.1.4 for the **disclosure year** from 1 July 2023 to 30 June 2024, -\$21.1 million;

28.1.5 for the **disclosure year** from 1 July 2024 to 30 June 2025, -\$21.1 million; and

28.1.6 a tax gross-up amount calculated at the **corporate tax rate**, and applying the **tax rules** where applicable, in respect of all after-tax amounts calculated in subclauses 28.1.1 to 28.1.5 in order to express the **forecast EV adjustments** on a pre-tax basis in the **forecast MAR** building block inputs.

28.2 For the purpose of calculating an update of the building blocks **forecast MAR** for a **pricing year** under a reconsideration of the price path under clause 3.7.5(1) of the **Transpower IM**, the **forecast EV adjustments** in clause 28.1 are to be adjusted so that, taking into account interest, if interest was accrued at the **RCP3 WACC** rate:

28.2.1 the amount of each **forecast EV adjustment** for the remaining **pricing years** of **RCP3** are equal; and

28.2.2 if the same annual forecast **EV adjustment** was applied for each of the five **pricing years** following the end of **RCP3**, the forecast balance of the **EV account** would be zero at the end of that period.

28.3 For the purposes of clause 28.2, where **EV adjustments** are updated, a tax gross-up amount is calculated, consistent with clause 28.1.6.

29. Forecast opex for the Incremental rolling incentive scheme (IRIS)

29.1 For the calculation of the **opex incentive amount**, the amount of forecast **operating expenditure** specified by the **Commission** for IRIS calculations is specified in clause 29.2, as adjusted for any disparity between the **forecast CPI** that applied when the forecast **operating expenditure** was initially determined and the **CPI**, as specified in clause 29.3.

29.2 For the purposes of the calculation of the **opex incentive amount**, the amount of forecast **operating expenditure** specified by the **Commission** is, for a **disclosure year**, as follows:

29.2.1 for the **disclosure year** from 1 July 2020 to 30 June 2021, \$277.3 million;

29.2.2 for the **disclosure year** from 1 July 2021 to 30 June 2022, \$281.8 million;

29.2.3 for the **disclosure year** from 1 July 2022 to 30 June 2023, \$291.8 million;

29.2.4 for the **disclosure year** from 1 July 2023 to 30 June 2024, \$301.3 million; and

29.2.5 for the **disclosure year** from 1 July 2024 to 30 June 2025, \$301.6 million.

29.3 For the purposes of clause 29.1 and any disparity adjustments in calculating the **opex incentive amount**, the **forecast CPI** that applied when the **opex allowance** was determined is the same as that set out in clause 24.2.

30. Independent assurance report

30.1 Where **Transpower** is required to provide an **independent assurance report**, **Transpower** must procure an assurance report by an **assurance auditor** in respect of the **annual compliance statement** that:

30.1.1 is prepared in accordance with Standard on Assurance Engagements 3100 – Compliance Engagements (SAE3100) and International Standard on Assurance Engagements 3000 (ISAE(NZ)3000) or their successor standards, signed by the **assurance auditor**, either in his or her own name or that of his or her firm; and

30.1.2 is addressed to the **directors** of **Transpower** and to the **Commission** as the intended users of the assurance report.



- 30.2 The **independent assurance report** must state:
- 30.2.1 that it has been prepared in accordance with Standard on Assurance Engagements 3100 – Compliance Engagements (SAE3100) and International Standard on Assurance Engagements 3000 (ISAE(NZ)3000) or their successor standards;
  - 30.2.2 the work done by the **assurance auditor**;
  - 30.2.3 the scope and limitations of the assurance engagement;
  - 30.2.4 the existence of any relationship (other than that of auditor) which the **assurance auditor** has with, or any interests which the **assurance auditor** has in, **Transpower** or any of its subsidiaries;
  - 30.2.5 whether the **assurance auditor** has obtained sufficient recorded information and explanations that they required and, if not, the information and explanations not obtained;
  - 30.2.6 whether, in the **assurance auditor's** opinion, as far as appears from an examination of them, proper records to enable the complete and accurate compilation of the **annual compliance statement** have been kept by **Transpower** and, if not, the records not so kept;
  - 30.2.7 whether in the **assurance auditor's** opinion, as far as appears from the examination, the information used in the preparation of the **annual compliance statement** has, where applicable, been properly extracted from **Transpower's** accounting and other records, sourced from its financial and non-financial systems; and
  - 30.2.8 whether in the **assurance auditor's** opinion, **Transpower** has complied, in all material respects, with this determination in preparing the **annual compliance statement** and, if not, the respects in which it has not done so.

### 31. Exemptions

- 31.1 The **Commission** may at any time, by way of written notice to **Transpower**:
- 31.1.1 exempt **Transpower** from any of the information disclosure requirements contained in clauses 18, 19, and 21 to 23 of this determination, for a period and on such terms and conditions as the **Commission** specifies in the notice; and
  - 31.1.2 amend or revoke any such exemption.

### Schedule A: Forecast MAR and forecast SMAR summary

Forecast MAR applied to pricing years in RCP3 ending	Forecast MAR is calculated based on building block values for the disclosure year ending	Initial determined value of forecast MAR	Incremental update to forecast MAR determined in November 2020	Incremental update to forecast MAR determined in November 2021	Incremental update to forecast MAR determined in November 2022	Incremental update to forecast MAR determined in November 2023	Total forecast MAR applicable to the pricing year (sum of amounts in columns 3 to 7)	Forecast SMAR applicable to the pricing years in RCP3
[Column 1]	[Column 2]	[Column 3]	[Column 4]	[Column 5]	[Column 6]	[Column 7]	[Column 8]	[Column 9]
31 March 2021 (Year 1)	30 June 2021	\$840.9 million	N/A	N/A	N/A	N/A	\$840.9 million	\$842.4 million
31 March 2022 (Year 2)	30 June 2022	\$842.2 million	\$X.X million	N/A	N/A	N/A	\$842.2 million	\$847.8 million
31 March 2023 (Year 3)	30 June 2023	\$845.7 million	\$XX million	\$X.X million	N/A	N/A	\$845.7 million	\$853.4 million
31 March 2024 (Year 4)	30 June 2024	\$867.0 million	\$X.X million	\$X.X million	\$X.X million	N/A	\$867.0 million	\$859.0 million
31 March 2025 (Year 5)	30 June 2025	\$872.8 million	\$X.X million	\$X.X million	\$X.X million	\$X.X million	\$872.8 million	\$864.6 million

### Schedule B: EV account summary

Item	Formula	Description
[Column 1]	[Column 2]	[Column 3]
Opening <b>EV account</b> balance	A	Closing balance in the <b>EV account</b> for the previous <b>disclosure year</b>
Post-tax <b>WACC</b>	B	The post-tax estimate corresponding to <b>WACC</b>
Interest on opening <b>EV account</b> balance	<b>C = A x B</b>	Opening <b>EV account</b> balance multiplied by the post-tax estimate corresponding to <b>WACC</b>
<b>EV account entries</b>	D	The <b>EV account entries</b> as specified in clause 27.1.3
<b>RCP3 forecast EV adjustments</b> in respect of the closing <b>EV account</b> balance for the final <b>disclosure year</b> of <b>RCP2</b>	E	Forecast <b>EV adjustments</b> for each of the 2021-2025 <b>relevant pricing years</b> in respect of the closing <b>EV account</b> balance for the final <b>disclosure year</b> of <b>RCP2</b> , as set out in clauses 28.1.1 to 28.1.5
Closing <b>EV account</b> balance	<b>F = A + C + D - E</b>	Opening <b>EV account</b> balance plus interest on opening <b>EV account</b> balance plus <b>EV account entries</b> minus forecast <b>EV adjustments</b>

**Schedule C1: Approved base capex summary (commissioned basis, including capitalised operating leases)**

Disclosure year ending	Value of base capex allowance as determined [XX] August 2019	Incremental approved listed project base capex determined in November 2020	Incremental approved listed project base capex determined in November 2021	Incremental approved listed project base capex determined in November 2022	Incremental approved listed project base capex determined in November 2023	Approved base capex for purposes of forecast MAR in the disclosure year (sum of amounts in columns 2 to 6)
[Column 1]	[Column 2]	[Column 3]	[Column 4]	[Column 5]	[Column 6]	[Column 7]
30 June 2021	\$207.2 million	N/A	N/A	N/A	N/A	\$207.2 million
30 June 2022	\$265.8 million	\$XX.X million	N/A	N/A	N/A	\$265.8 million
30 June 2023	\$304.3 million	\$XX.X million	\$XX.X million	N/A	N/A	\$304.3 million
30 June 2024	\$273.5 million	\$XX.X million	\$XX.X million	\$XX.X million	N/A	\$273.5 million
30 June 2025	\$323.1 million	\$XX.X million	\$XX.X million	\$XX.X million	\$XX.X million	\$323.1 million

**Schedule C2: Approved base capex summary (expenditure basis, excluding capitalised operating leases)**

Disclosure year ending	Value of base capex allowance as determined [XX] August 2019	Incremental approved listed project base capex determined in November 2020	Incremental approved listed project base capex determined in November 2021	Incremental approved listed project base capex determined in November 2022	Incremental approved listed project base capex determined in November 2023	Approved base capex for purposes of base capex expenditure adjustments in the disclosure year (sum of amounts in columns 2 to 6)
[Column 1]	[Column 2]	[Column 3]	[Column 4]	[Column 5]	[Column 6]	[Column 7]
30 June 2021	\$223.6 million	N/A	N/A	N/A	N/A	\$223.6 million
30 June 2022	\$278.3 million	\$XX.X million	N/A	N/A	N/A	\$278.3 million
30 June 2023	\$275.2 million	\$XX.X million	\$XX.X million	N/A	N/A	\$275.2 million
30 June 2024	\$278.7 million	\$XX.X million	\$XX.X million	\$XX.X million	N/A	\$278.7 million
30 June 2025	\$282.6 million	\$XX.X million	\$XX.X million	\$XX.X million	\$XX.X million	\$282.6 million

### Schedule D: Forecast MAR building blocks calculation

FORECAST MAR BUILDING BLOCK	DESCRIPTION OF NOMINAL VALUE INPUT TO BE APPLIED	FORMULA FOR FORECAST INCOME/ EXPENDITURE/ OTHER NOMINAL VALUES	CASH FLOW TIMING FACTOR TO APPLY TO FORECAST NOMINAL VALUE INPUT	FORECAST MAR BUILDING BLOCK VALUE
[Column 1]	[Column 2]	[Column 3]	[Column 4]	[Column 5]
WACC	<b>WACC</b>	A1	WACC = A1	
WACC return on forecast opening RAB value	Forecast sum of <b>opening RAB value</b> for the <b>disclosure year</b>	B	$A1 / (1 + A1)^{163/365}$	$B \times A1 / (1 + A1)^{163/365}$
WACC return on forecast VCA <sub>JUL</sub>	Forecast sum of <b>value of commissioned asset</b> for the month in the <b>disclosure year</b>	C1	$((1 + A1)^{349.5/365} - 1) / (1 + A1)^{163/365}$	$C1 \times ((1 + A1)^{349.5/365} - 1) / (1 + A1)^{163/365}$
WACC return on forecast VCA <sub>AUG</sub>		C2	$((1 + A1)^{318.5/365} - 1) / (1 + A1)^{163/365}$	$C2 \times ((1 + A1)^{318.5/365} - 1) / (1 + A1)^{163/365}$
WACC return on forecast VCA <sub>SEP</sub>		C3	$((1 + A1)^{288/365} - 1) / (1 + A1)^{163/365}$	$C3 \times ((1 + A1)^{288/365} - 1) / (1 + A1)^{163/365}$
WACC return on forecast VCA <sub>OCT</sub>		C4	$((1 + A1)^{257.5/365} - 1) / (1 + A1)^{163/365}$	$C4 \times ((1 + A1)^{257.5/365} - 1) / (1 + A1)^{163/365}$
WACC return on forecast VCA <sub>NOV</sub>		C5	$((1 + A1)^{227/365} - 1) / (1 + A1)^{163/365}$	$C5 \times ((1 + A1)^{227/365} - 1) / (1 + A1)^{163/365}$
WACC return on forecast VCA <sub>DEC</sub>		C6	$((1 + A1)^{196.5/365} - 1) / (1 + A1)^{163/365}$	$C6 \times ((1 + A1)^{196.5/365} - 1) / (1 + A1)^{163/365}$
WACC return on forecast VCA <sub>JAN</sub>		C7	$((1 + A1)^{165.5/365} - 1) / (1 + A1)^{163/365}$	$C7 \times ((1 + A1)^{165.5/365} - 1) / (1 + A1)^{163/365}$

FORECAST MAR BUILDING BLOCK	DESCRIPTION OF NOMINAL VALUE INPUT TO BE APPLIED	FORMULA FOR FORECAST INCOME/ EXPENDITURE/ OTHER NOMINAL VALUES	CASH FLOW TIMING FACTOR TO APPLY TO FORECAST NOMINAL VALUE INPUT	FORECAST MAR BUILDING BLOCK VALUE
[Column 1]	[Column 2]	[Column 3]	[Column 4]	[Column 5]
WACC return on forecast $VCA_{FEB}$	Forecast sum of <b>value of commissioned asset</b> for the month in the <b>disclosure year</b>	C8	$((1 + A1)^{136/365} - 1) / (1 + A1)^{163/365}$	$C8 \times ((1 + A1)^{136/365} - 1) / (1 + A1)^{163/365}$
WACC return on forecast $VCA_{MAR}$		C9	$((1 + A1)^{106.5/365} - 1) / (1 + A1)^{163/365}$	$C9 \times ((1 + A1)^{106.5/365} - 1) / (1 + A1)^{163/365}$
WACC return on forecast $VCA_{APL}$		C10	$((1 + A1)^{76/365} - 1) / (1 + A1)^{163/365}$	$C10 \times ((1 + A1)^{76/365} - 1) / (1 + A1)^{163/365}$
WACC return on forecast $VCA_{MAY}$		C11	$((1 + A1)^{45.5/365} - 1) / (1 + A1)^{163/365}$	$C11 \times ((1 + A1)^{45.5/365} - 1) / (1 + A1)^{163/365}$
WACC return on forecast $VCA_{JUN}$		C12	$((1 + A1)^{15/365} - 1) / (1 + A1)^{163/365}$	$C12 \times ((1 + A1)^{15/365} - 1) / (1 + A1)^{163/365}$
Total forecast capital charge		Sum of <b>forecast MAR</b> building block values for formulas B through C12		

FORECAST MAR BUILDING BLOCK	DESCRIPTION OF NOMINAL VALUE INPUT TO BE APPLIED	FORMULA FOR FORECAST INCOME/ EXPENDITURE/ OTHER NOMINAL VALUES	CASH FLOW TIMING FACTOR TO APPLY TO FORECAST NOMINAL VALUE INPUT	FORECAST MAR BUILDING BLOCK VALUE
[Column 1]	[Column 2]	[Column 3]	[Column 4]	[Column 5]
Forecast depreciation	Forecast <b>depreciation</b>	E	$1 / (1 + A1)^{163/365}$	$E / (1 + A1)^{163/365}$
Operating expenditure	<b>Opex allowance</b> as specified in clause 24.1.6.	F	$(1 + A1)^{19/365}$	$F \times (1 + A1)^{19/365}$
Forecast tax	Forecast <b>regulatory tax allowance</b> , calculated in accordance with clause 25.1.2(g)	G	$(1 + A1)^{19/365}$	$G \times (1 + A1)^{19/365}$
Forecast TCSD	Forecast <b>term credit spread differential allowance</b> , calculated in accordance with Part 3, Subpart 5 of the <b>Transpower IM</b>	H	$(1 + A1)^{19/365}$	$H \times (1 + A1)^{19/365}$
Forecast EV adjustment	Forecast <b>EV adjustment</b> , as specified in clauses 28.1.1 to 28.1.5 including a tax gross up calculated at the <b>corporate tax rate</b>	I	$1 / (1 + A1)^{163/365}$	$I / (1 + A1)^{163/365}$



FORECAST MAR BUILDING BLOCK	DESCRIPTION OF NOMINAL VALUE INPUT TO BE APPLIED	FORMULA FOR FORECAST INCOME/ EXPENDITURE/ OTHER NOMINAL VALUES	CASH FLOW TIMING FACTOR TO APPLY TO FORECAST NOMINAL VALUE INPUT	FORECAST MAR BUILDING BLOCK VALUE
[Column 1]	[Column 2]	[Column 3]	[Column 4]	[Column 5]
Forecast pass-through costs	Forecast <b>pass-through costs</b> in accordance with Part 3, Subpart 1 of the <b>Transpower IM</b> , as specified in clauses 25.1.2(i)(i)-(v)	J	$(1 + A1)^{19/365}$	$L \times (1 + A1)^{19/365}$
Forecast recoverable costs	Forecast <b>recoverable costs</b> in accordance with Part 3, Subpart 1 of the <b>Transpower IM</b> , as specified in clauses 25.1.2(j)(i)-(v)	K	$(1 + A1)^{19/365}$	$M \times (1 + A1)^{19/365}$
<b>TOTAL FORECAST MAR INCLUSIVE OF FORECAST PASS-THROUGH COSTS AND FORECAST RECOVERABLE COSTS</b>	Sum of <b>forecast MAR</b> building block values			Sum L = Sum D plus sum of <b>forecast MAR</b> building block values E to K

### Schedule E: Wash-up building blocks calculation

WASH-UP BUILDING BLOCK	DESCRIPTION OF NOMINAL VALUE INPUT TO BE APPLIED	FORMULA FOR INCOME/ EXPENDITURE/ OTHER NOMINAL VALUES	CASH FLOW TIMING FACTOR TO APPLY TO NOMINAL VALUE INPUT	WASH-UP VALUE
[Column 1]	[Column 2]	[Column 3]	[Column 4]	[Column 5]
WACC	<b>WACC</b>	A1	WACC = A1	
WACC return on opening RAB value	Sum of <b>opening RAB value</b> for the <b>disclosure year</b>	B	A1	B x A1
WACC return on VCA <sub>JUL</sub>	Sum of <b>value of commissioned asset</b> for the month in the <b>disclosure year</b>	C1	$(1 + A1)^{349.5/365} - 1$	$C1 \times ((1 + A1)^{349.5/365} - 1)$
WACC return on VCA <sub>AUG</sub>		C2	$(1 + A1)^{318.5/365} - 1$	$C2 \times ((1 + A1)^{318.5/365} - 1)$
WACC return on VCA <sub>SEP</sub>		C3	$(1 + A1)^{288/365} - 1$	$C3 \times ((1 + A1)^{288/365} - 1)$
WACC return on VCA <sub>OCT</sub>		C4	$(1 + A1)^{257.5/365} - 1$	$C4 \times ((1 + A1)^{257.5/365} - 1)$
WACC return on VCA <sub>NOV</sub>		C5	$(1 + A1)^{227/365} - 1$	$C5 \times ((1 + A1)^{227/365} - 1)$
WACC return on VCA <sub>DEC</sub>		C6	$(1 + A1)^{196.5/365} - 1$	$C6 \times ((1 + A1)^{196.5/365} - 1)$
WACC return on VCA <sub>JAN</sub>		C7	$(1 + A1)^{165.5/365} - 1$	$C7 \times ((1 + A1)^{165.5/365} - 1)$
WACC return on VCA <sub>FEB</sub>		C8	$(1 + A1)^{136/365} - 1$	$C8 \times ((1 + A1)^{136/365} - 1)$

WASH-UP BUILDING BLOCK	DESCRIPTION OF NOMINAL VALUE INPUT TO BE APPLIED	FORMULA FOR INCOME/ EXPENDITURE/ OTHER NOMINAL VALUES	CASH FLOW TIMING FACTOR TO APPLY TO NOMINAL VALUE INPUT	WASH-UP VALUE
[Column 1]	[Column 2]	[Column 3]	[Column 4]	[Column 5]
WACC return on VCA <sub>MAR</sub>	Sum of <b>value of commissioned asset</b> for the month in the <b>disclosure year</b>	C9	$(1 + A1)^{106.5/365} - 1$	$C9 \times ((1 + A1)^{106.5/365} - 1)$
WACC return on VCA <sub>APL</sub>		C10	$(1 + A1)^{76/365} - 1$	$C10 \times ((1 + A1)^{76/365} - 1)$
WACC return on VCA <sub>MAY</sub>		C11	$(1 + A1)^{45.5/365} - 1$	$C11 \times ((1 + A1)^{45.5/365} - 1)$
WACC return on VCA <sub>JUN</sub>		C12	$(1 + A1)^{15/365} - 1$	$C12 \times ((1 + A1)^{15/365} - 1)$
WACC return on lost assets	Sum of the <b>opening RAB value of lost assets</b> in the <b>disclosure year</b>	D	$1 - (1 + A1)^{182/365}$	$D \times (1 - (1 + A1)^{182/365})$
WACC return on found assets	Sum of the <b>value of found asset of found assets</b> in the <b>disclosure year</b>	E	$(1 + A1)^{182/365} - 1$	$E \times ((1 + A1)^{182/365} - 1)$
WACC return on disposed assets	Sum of <b>opening RAB value of disposed assets</b> in the <b>disclosure year</b>	F	$1 - (1 + A1)^{182/365}$	$F \times (1 - (1 + A1)^{182/365})$
Total capital charge	Sum of wash-up values for formulas B through F			Sum G = sum of wash-up values B to F

WASH-UP BUILDING BLOCK	DESCRIPTION OF NOMINAL VALUE INPUT TO BE APPLIED	FORMULA FOR INCOME/ EXPENDITURE/ OTHER NOMINAL VALUES	CASH FLOW TIMING FACTOR TO APPLY TO NOMINAL VALUE INPUT	WASH-UP VALUE
[Column 1]	[Column 2]	[Column 3]	[Column 4]	[Column 5]
Transmission revenues received	Sum of <b>actual transmission revenue</b>	H	$(1 + A1)^{163/365}$	$H \times (1 + A1)^{163/365}$
Transpower adjustment to recognise voluntarily foregone revenues	Amount of <b>HVAC revenue</b> and <b>HVDC revenue</b> permanently foregone by <b>Transpower</b>	J	$(1 + A1)^{163/365}$	$J \times (1 + A1)^{163/365}$
Other regulated income	Sum of <b>other regulated income</b>	K	$(1 + A1)^{182/365}$	$K \times (1 + A1)^{182/365}$
Gain/(loss) on disposal of assets	Sum of disposal proceeds less <b>opening RAB value</b> for <b>disposed assets</b>	L	$(1 + A1)^{182/365}$	$L \times (1 + A1)^{182/365}$
Total income	Sum of wash-up values for formulas H to L			Sum M = sum of wash-up values H, J, K and L

WASH-UP BUILDING BLOCK	DESCRIPTION OF NOMINAL VALUE INPUT TO BE APPLIED	FORMULA FOR INCOME/ EXPENDITURE/ OTHER NOMINAL VALUES	CASH FLOW TIMING FACTOR TO APPLY TO NOMINAL VALUE INPUT	WASH-UP VALUE
[Column 1]	[Column 2]	[Column 3]	[Column 4]	[Column 5]
Operating expenditure	<b>Opex allowance</b> as specified in clause 24.1.6, adjusted for any disparity between the <b>forecast CPI</b> specified in clause 27.2.4 and actual <b>CPI</b>	N	$(1 + A1)^{182/365}$	$N \times (1 + A1)^{182/365}$
Depreciation	<b>Depreciation</b> (excluding <b>depreciation on disposed assets</b> )	O		O
TCSD	The <b>term credit spread differential allowance</b> , calculated in accordance with Part 3, Subpart 5 of the <b>Transpower IM</b>	P	$(1 + A1)^{182/365}$	$P \times (1 + A1)^{182/365}$
Forecast pass-through costs and forecast recoverable costs	Forecast <b>pass-through costs</b> and forecast <b>recoverable costs</b> specified in clauses 25.1.2(i) and 25.1.2(j).	Q	$(1 + A1)^{182/365}$	$Q \times (1 + A1)^{182/365}$
Net operating profit/(loss) before tax	Sum of wash-up values for formulas M through P			Sum R = Sum M, less wash-up values N to Q
Tax	The <b>regulatory tax allowance</b> calculated in accordance with clause 24.1.8	S	$(1 + A1)^{182/365}$	$S \times (1 + A1)^{182/365}$
Net operating profit/(loss) after tax	Sum of wash-up values for formulas Q and R			Sum T = Sum R, less wash-up value S

WASH-UP BUILDING BLOCK	DESCRIPTION OF NOMINAL VALUE INPUT TO BE APPLIED	FORMULA FOR INCOME/ EXPENDITURE/ OTHER NOMINAL VALUES	CASH FLOW TIMING FACTOR TO APPLY TO NOMINAL VALUE INPUT	WASH-UP VALUE
[Column 1]	[Column 2]	[Column 3]	[Column 4]	[Column 5]
<b>AFTER-TAX EX-POST ECONOMIC GAIN OR LOSS</b>	Difference between the capital charge (Sum G) and the net operating profit/(loss) after tax (Sum S)			Difference U = Sum G less Sum T
Forecast EV adjustment included in forecast MAR	Adjustment to recognise the forecast <b>EV adjustment</b> , before tax gross up, as applied in setting the <b>forecast MAR</b>	V		V
Actual pass-through costs and recoverable costs	Actual <b>pass-through costs</b> and <b>recoverable costs</b> incurred by <b>Transpower</b> as calculated in Schedule H, Sum M.	W	$(1 + A1)^{182/365}$	$W \times (1 + A1)^{182/365}$
Forecast pass through costs and forecast recoverable costs	Forecast <b>pass-through costs</b> and forecast <b>recoverable costs</b> specified in clauses 25.1.2(i) and 25.1.2(j).	X	$(1 + A1)^{182/365}$	$X \times (1 + A1)^{182/365}$
<b>EV ACCOUNT ENTRY</b>	This is the after-tax <b>ex-post economic gain or loss</b> adjusted for the <b>forecast EV adjustment</b> applied in setting the <b>forecast MAR</b> for the <b>relevant pricing year</b> , and is an <b>EV account entry</b>			Difference Y = Difference U plus value W, less values V and X

**Schedule F: Point of service sub-categories – Measures of grid performance GP1 and GP2 points of service**

RCP3 Sub-Category	Measure reference	Point of service	Customer
N security material economic consequence	GP1D and GP2D	ABY011_S1	ALPE
N-1 security high economic consequence	GP1A and GP2A	ALB033_S1	VECT
N-1 security high economic consequence	GP1A and GP2A	ALB110_S1	VECT
N security material economic consequence	GP1D and GP2D	APS011_S1	ORON
N security generator	GP1F and GP2F	ARA220_I1	MRPL
N security generator	GP1F and GP2F	ARG110_I1	TRUS
N-1 security generator	GP1E and GP2E	ARI110_I1	MRPL
N-1 security material economic consequence	GP1B and GP2B	ASB033_S1	EASH
N-1 security high economic consequence	GP1A and GP2A	ASB066_S1_S2	EASH
N-1 security material economic consequence	GP1B and GP2B	ASY011_S1	MPOW
N-1 security generator	GP1E and GP2E	ATI220_I1	MRPL
N security material economic consequence	GP1D and GP2D	ATU110_S1	WPOW
N-1 security generator	GP1E and GP2E	AVI220_I1	MERI
N-1 security material economic consequence	GP1B and GP2B	BAL033_S1	OTNT
N-1 security material economic consequence	GP1B and GP2B	BDE011_S1	RAYN
N-1 security material economic consequence	GP1B and GP2B	BDE011_S2	SENZ
N-1 security generator	GP1E and GP2E	BEN220_I1	MERI
N-1 security high economic consequence	GP1A and GP2A	BLN033_S1	MARL
N-1 security material economic consequence	GP1B and GP2B	BOB033_S1	COUP
N-1 security high economic consequence	GP1A and GP2A	BOB110_S1	COUP
N security material economic consequence	GP1D and GP2D	BPD110_S1	ALPE
N-1 security high economic consequence	GP1A and GP2A	BPE033_S1	POCO
N-1 security material economic consequence	GP1B and GP2B	BPE055_S1_S2	TRNZ
N security material economic consequence	GP1D and GP2D	BPT110_S1	WATA
N-1 security high economic consequence	GP1A and GP2A	BRB033_S1	NPOW
N security material economic consequence	GP1D and GP2D	BRK033_S1	POCO
N-1 security high economic consequence	GP1A and GP2A	BRY066_S1_S2_S3	ORON
N security generator	GP1F and GP2F	BWK110_I1	TRUS

RCP3 Sub-Category	Measure reference	Point of service	Customer
N-1 security material economic consequence	GP1B and GP2B	CBG011_S1	WAIP
N security material economic consequence	GP1D and GP2D	CLH011_S1	ORON
N-1 security material economic consequence	GP1B and GP2B	CML033_S1	DUNE
N security material economic consequence	GP1D and GP2D	COL011_S1	ORON
N-1 security generator	GP1E and GP2E	COL066_I1	TRUS
N-1 security material economic consequence	GP1B and GP2B	CPK011_S1	WELL
N-1 security high economic consequence	GP1A and GP2A	CPK033_S1	WELL
N-1 security material economic consequence	GP1B and GP2B	CST033_S1	POCO
N-1 security material economic consequence	GP1B and GP2B	CUL033_S1	MPOW
N security material economic consequence	GP1D and GP2D	CUL066_S1	MPOW
N-1 security material economic consequence	GP1B and GP2B	CYD033_S1	DUNE
N-1 security generator	GP1E and GP2E	CYD220_I1	CTCT
N-1 security material economic consequence	GP1B and GP2B	DOB033_S1	WPOW
N-1 security material economic consequence	GP1B and GP2B	DVK011_S1	SCAN
N-1 security high economic consequence	GP1A and GP2A	EDG033_S1	HRZE
N-1 security material economic consequence	GP1B and GP2B	EDN033_S1	POWN
N-1 security material economic consequence	GP1B and GP2B	FHL033_S1	HAWK
N-1 security high economic consequence	GP1A and GP2A	FKN033_S1	DUNE
N-1 security high economic consequence	GP1A and GP2A	FKN033_S2	ESLL
N-1 security material economic consequence	GP1B and GP2B	GFD033_S1	WELL
N-1 security generator	GP1E and GP2E	GLN033_I1	NZST
N security high economic consequence	GP1C and GP2C	GLN033_S1_S2	NZST
N-1 security high economic consequence	GP1A and GP2A	GLN033_S3	COUP
N-1 security material economic consequence	GP1B and GP2B	GOR033_S1	POWN
N-1 security material economic consequence	GP1B and GP2B	GYM066_S1	WPOW
N-1 security material economic consequence	GP1B and GP2B	GYT033_S1	POCO
N-1 security material economic consequence	GP1B and GP2B	HAM011_S1	WELE
N-1 security high economic consequence	GP1A and GP2A	HAM033_S1	WELE
N-1 security material economic consequence	GP1B and GP2B	HAM055_S1_S2	TRNZ
N-1 security material economic consequence	GP1B and GP2B	HAY011_S1	WELL



RCP3 Sub-Category	Measure reference	Point of service	Customer
N-1 security material economic consequence	GP1B and GP2B	HAY033_S1	WELL
N-1 security high economic consequence	GP1A and GP2A	HEN033_S1	VECT
N-1 security high economic consequence	GP1A and GP2A	HEP033_S1	VECT
N security high economic consequence	GP1C and GP2C	HIN033_S1	POCO
N-1 security material economic consequence	GP1B and GP2B	HKK066_S1	WPOW
N-1 security material economic consequence	GP1B and GP2B	HLY033_S1_S2	WELE
N-1 security generator	GP1E and GP2E	HLY220_I1	GENE
N-1 security high economic consequence	GP1A and GP2A	HOB110_S1	VECT
N-1 security material economic consequence	GP1B and GP2B	HOR033_S1	ORON
N-1 security material economic consequence	GP1B and GP2B	HOR066_S1	ORON
N-1 security material economic consequence	GP1B and GP2B	HTI033_S1	WTOM
N-1 security high economic consequence	GP1A and GP2A	HUI033_S1	POCO
N-1 security material economic consequence	GP1B and GP2B	HWA033_S1	POCO
N-1 security material economic consequence	GP1B and GP2B	HWA033_S2	KUPE
N-1 security generator	GP1E and GP2E	HWA110_I1	KIWI
N-1 security generator	GP1E and GP2E	HWA110_I2	TRUS
N-1 security high economic consequence	GP1A and GP2A	HWB033_S1	DUNE
N-1 security high economic consequence	GP1A and GP2A	HWB033_S2	OTNT
N-1 security material economic consequence	GP1B and GP2B	HWB110_S1	OTNT
N-1 security high economic consequence	GP1A and GP2A	INV033_S1	POWN
N-1 security high economic consequence	GP1A and GP2A	ISL033_S1	ORON
N-1 security high economic consequence	GP1A and GP2A	ISL066_S1	ORON
N-1 security material economic consequence	GP1B and GP2B	KAI011_S1	MPOW
N-1 security high economic consequence	GP1A and GP2A	KAW011_S1	HRZE
N-1 security high economic consequence	GP1A and GP2A	KAW011_S4_S5_S6_S7_S8_S9	TAPP
N-1 security generator	GP1E and GP2E	KAW110_I1	TAPP
N-1 security material economic consequence	GP1B and GP2B	KBY066_S1_S2	ORON
N security material economic consequence	GP1D and GP2D	KIK011_S1	TASM
N-1 security generator	GP1E and GP2E	KIN011_I2	POCO
N-1 security material economic consequence	GP1B and GP2B	KIN011_S1_S2	POCO

RCP3 Sub-Category	Measure reference	Point of service	Customer
N security material economic consequence	GP1D and GP2D	KIN033_S1	POCO
N-1 security material economic consequence	GP1B and GP2B	KMO033_S1	POCO
N-1 security material economic consequence	GP1B and GP2B	KOE110_S1	TOPE
N security generator	GP1F and GP2F	KPA110_I1	TBOP
N-1 security generator	GP1E and GP2E	KPO110_I1	MRPL
N-1 security material economic consequence	GP1B and GP2B	KPU066_S1	POCO
N-1 security generator	GP1E and GP2E	KUM066_I1	WPOW
N-1 security material economic consequence	GP1B and GP2B	KUM066_S1	WPOW
N-1 security material economic consequence	GP1B and GP2B	KWA011_S1	WELL
N-1 security material economic consequence	GP1B and GP2B	LFD110_S1	VECT
N-1 security material economic consequence	GP1B and GP2B	LTN033_S1	POCO
N-1 security generator	GP1E and GP2E	MAN220_I1	MERI
N-1 security generator	GP1E and GP2E	MAT110_I1	SGGP
N-1 security generator	GP1E and GP2E	MAT110_I2	TRUS
N security material economic consequence	GP1D and GP2D	MCH011_S1	TASM
N-1 security material economic consequence	GP1B and GP2B	MGM033_S1	POCO
N-1 security generator	GP1E and GP2E	MHO033_I2	HORO
N-1 security material economic consequence	GP1B and GP2B	MHO033_S1	HORO
N security generator	GP1F and GP2F	MKE110_I1	TBOP
N-1 security material economic consequence	GP1B and GP2B	MLG011_S1	WELL
N-1 security material economic consequence	GP1B and GP2B	MLG033_S1	WELL
N-1 security high economic consequence	GP1A and GP2A	MNG033_S1	VECT
N-1 security material economic consequence	GP1B and GP2B	MNG110_S1	VECT
N-1 security material economic consequence	GP1B and GP2B	MNI011_S1_S2	METH
N-1 security high economic consequence	GP1A and GP2A	MPE110_S1	NPOW
N-1 security material economic consequence	GP1B and GP2B	MST033_S1	POCO
N-1 security generator	GP1E and GP2E	MTI220_I1	MRPL
N-1 security material economic consequence	GP1B and GP2B	MTM033_S1	POCO
N-1 security material economic consequence	GP1B and GP2B	MTN033_S1	POCO
N-1 security material economic consequence	GP1B and GP2B	MTO033_S1	NPOW

RCP3 Sub-Category	Measure reference	Point of service	Customer
N security material economic consequence	GP1D and GP2D	MTR033_S1	POCO
N-1 security generator	GP1E and GP2E	NAP220_I1	NAPA
N-1 security generator	GP1E and GP2E	NAP220_I2	NTRG
N-1 security high economic consequence	GP1A and GP2A	NMA033_S1	POWN
N security material economic consequence	GP1D and GP2D	NPK033_S1	WTOM
N-1 security material economic consequence	GP1B and GP2B	NPL033_S1	PTNP
N-1 security material economic consequence	GP1B and GP2B	NPL033_S2	POCO
N-1 security high economic consequence	GP1A and GP2A	NSY033_S1	OTNT
N-1 security material economic consequence	GP1B and GP2B	OAM033_S1	WATA
N-1 security generator	GP1E and GP2E	OHA220_I1	MERI
N-1 security generator	GP1E and GP2E	OHB220_I1	MERI
N-1 security generator	GP1E and GP2E	OHC220_I1	MERI
N-1 security generator	GP1E and GP2E	OHK220_I1	MRPL
N-1 security generator	GP1E and GP2E	OKI220_I1	CTCT
N security high economic consequence	GP1C and GP2C	OKN011_S1	POCO
N security high economic consequence	GP1C and GP2C	OKN011_S2	WTOM
N security material economic consequence	GP1D and GP2D	ONG033_S1	WTOM
N-1 security material economic consequence	GP1B and GP2B	OPK033_S1	POCO
N-1 security material economic consequence	GP1B and GP2B	ORO110_S1	BUEL
N-1 security high economic consequence	GP1A and GP2A	OTA022_S1	VECT
N security material economic consequence	GP1D and GP2D	OTI011_S1	WPOW
N-1 security material economic consequence	GP1B and GP2B	OWH011_S1	HAWK
N-1 security high economic consequence	GP1A and GP2A	PAK033_S1	VECT
N-1 security material economic consequence	GP1B and GP2B	PAO110_S1	POCO
N-1 security material economic consequence	GP1B and GP2B	PEN022_S1	VECT
N security high economic consequence	GP1C and GP2C	PEN025_S1	TRNZ
N-1 security high economic consequence	GP1A and GP2A	PEN033_S1	VECT
N-1 security high economic consequence	GP1A and GP2A	PEN033_S2	SHPK
N-1 security high economic consequence	GP1A and GP2A	PEN110_S1	VECT
N-1 security material economic consequence	GP1B and GP2B	PNI033_S1	WELL

RCP3 Sub-Category	Measure reference	Point of service	Customer
N security generator	GP1F and GP2F	PPI220_I1	CTCT
N-1 security material economic consequence	GP1B and GP2B	PRM033_S1	HORO
N-1 security material economic consequence	GP1B and GP2B	RDF033_S1	HAWK
N-1 security material economic consequence	GP1B and GP2B	RFN110_S1_S2	WPOW
N-1 security high economic consequence	GP1A and GP2A	ROS022_S1	VECT
N-1 security material economic consequence	GP1B and GP2B	ROS110_S1	VECT
N-1 security material economic consequence	GP1B and GP2B	ROT011_S1	HAWK
N-1 security material economic consequence	GP1B and GP2B	ROT033_S1	HAWK
N-1 security generator	GP1E and GP2E	ROT110_I1	TRUS
N-1 security generator	GP1E and GP2E	ROX110_I1	CTCT
N-1 security generator	GP1E and GP2E	ROX220_I1	CTCT
N-1 security generator	GP1E and GP2E	RPO220_I1	GENE
N-1 security material economic consequence	GP1B and GP2B	SBK033_S1	MPOW
N-1 security material economic consequence	GP1B and GP2B	SBK066_S1	MPOW
N-1 security material economic consequence	GP1B and GP2B	SDN033_S1	DUNE
N-1 security material economic consequence	GP1B and GP2B	SFD033_S1	POCO
N-1 security generator	GP1E and GP2E	SFD220_I1	CTCT
N-1 security high economic consequence	GP1A and GP2A	STK033_S1	TASM
N-1 security high economic consequence	GP1A and GP2A	STK033_S2	NELS
N-1 security material economic consequence	GP1B and GP2B	STK066_S1	TASM
N-1 security material economic consequence	GP1B and GP2B	STU011_S1	ALPE
N-1 security high economic consequence	GP1A and GP2A	SVL033_S1	VECT
N-1 security material economic consequence	GP1B and GP2B	SWN025_S1	TRNZ
N-1 security generator	GP1E and GP2E	SWN220_I1	SCGL
N-1 security high economic consequence	GP1A and GP2A	TAK033_S1	VECT
N-1 security material economic consequence	GP1B and GP2B	TGA011_S1	POCO
N-1 security high economic consequence	GP1A and GP2A	TGA033_S1	POCO
N-1 security generator	GP1E and GP2E	THI220_I1	CTCT
N-1 security high economic consequence	GP1A and GP2A	TIM011_S1	ALPE
N security generator	GP1F and GP2F	TKA011_I1	GENE

RCP3 Sub-Category	Measure reference	Point of service	Customer
N security material economic consequence	GP1D and GP2D	TKA033_S1	ALPE
N-1 security generator	GP1E and GP2E	TKB220_I1	GENE
N-1 security high economic consequence	GP1A and GP2A	TKR033_S1	WELL
N-1 security material economic consequence	GP1B and GP2B	TKU033_S1	WTOM
N-1 security material economic consequence	GP1B and GP2B	TKU033_S2	GENE
N-1 security generator	GP1E and GP2E	TKU220_I1	GENE
N-1 security material economic consequence	GP1B and GP2B	TMI033_S1	POCO
N-1 security high economic consequence	GP1A and GP2A	TMK033_S1	ALPE
N-1 security material economic consequence	GP1B and GP2B	TMN055_S1_S2	TRNZ
N security high economic consequence	GP1C and GP2C	TMU011_S1_S2	WAIP
N-1 security material economic consequence	GP1B and GP2B	TNG011_S1	WNST
N-1 security material economic consequence	GP1B and GP2B	TNG055_S1_S2	TRNZ
N security material economic consequence	GP1D and GP2D	TRK011_S1	HAWK
N-1 security generator	GP1E and GP2E	TUI110_I1	GENE
N-1 security high economic consequence	GP1A and GP2A	TUI110_S2	EAST
N-1 security generator	GP1E and GP2E	TWC220_I1	WIND
N-1 security generator	GP1E and GP2E	TWH033_I2	WELE
N-1 security high economic consequence	GP1A and GP2A	TWH033_S1	WELE
N-1 security high economic consequence	GP1A and GP2A	TWI220_S1	NZAS
N security high economic consequence	GP1C and GP2C	TWZ033_S1	ALPE
N security high economic consequence	GP1C and GP2C	TWZ033_S2	MERI
N security high economic consequence	GP1C and GP2C	TWZ033_S3	WATA
N-1 security material economic consequence	GP1B and GP2B	UHT033_S1	WELL
N security material economic consequence	GP1D and GP2D	WAI011_S1	HRZE
N-1 security material economic consequence	GP1B and GP2B	WDV011_S1	SCAN
N-1 security generator	GP1E and GP2E	WDV110_I1	MERI
N-1 security material economic consequence	GP1B and GP2B	WEL033_S1	VECT
N-1 security material economic consequence	GP1B and GP2B	WGN033_S1	POCO
N security high economic consequence	GP1C and GP2C	WHI011_S1_S2	PANP
N security high economic consequence	GP1C and GP2C	WHI011_S3	CTCT

<b>RCP3 Sub-Category</b>	<b>Measure reference</b>	<b>Point of service</b>	<b>Customer</b>
N-1 security generator	GP1E and GP2E	WHI220_I1	CTCT
N-1 security material economic consequence	GP1B and GP2B	WHU033_S1	POCO
N-1 security generator	GP1E and GP2E	WIL033_I1	WELL
N-1 security material economic consequence	GP1B and GP2B	WIL033_S1	WELL
N-1 security high economic consequence	GP1A and GP2A	WIR033_S1	VECT
N-1 security generator	GP1E and GP2E	WKM220_I1	MRPL
N-1 security material economic consequence	GP1B and GP2B	WKO033_S1	POCO
N security generator	GP1F and GP2F	WPA220_I1	MRPL
N security material economic consequence	GP1D and GP2D	WPR033_S1	MPOW
N-1 security material economic consequence	GP1B and GP2B	WPR066_S1	MPOW
N security material economic consequence	GP1D and GP2D	WPW011_S1	CHBP
N-1 security material economic consequence	GP1B and GP2B	WPW033_S1	CHBP
N-1 security material economic consequence	GP1B and GP2B	WRD033_S1	VECT
N-1 security material economic consequence	GP1B and GP2B	WRK033_S1	HAWK
N-1 security generator	GP1E and GP2E	WRK220_I1	CTCT
N-1 security generator	GP1E and GP2E	WTK011_I1	MERI
N-1 security material economic consequence	GP1B and GP2B	WTK011_S2	WATA
N-1 security material economic consequence	GP1B and GP2B	WTK033_S1	WATA
N-1 security high economic consequence	GP1A and GP2A	WTU033_S1	HAWK
N security high economic consequence	GP1C and GP2C	WVY011_S1	POCO
N security generator	GP1F and GP2F	WWD110_I1	MELW

## Schedule G: Quality standards - HVAC circuits for asset performance measure AP2

Asset name	Outage Block Description (circuit)
ARI_KIN_1	Arapuni–Kinleith Circuit 1
ARI_KIN_2	Arapuni–Kinleith Circuit 2
ASB_CB_292	Ashburton 220 kV Line Circuit Breaker 292
ASB_CB_492	Ashburton 220 kV Line Circuit Breaker 492
ASB_ISL_1	Ashburton–Islington 220 kV Circuit 1
ASB_TIM_TWZ_1	Ashburton–Timaru–Twizel 220 kV Circuit 1
ASB_TIM_TWZ_2	Ashburton–Timaru–Twizel 220 kV Circuit 2
ATI_WKM_1	Atiamuri–Whakamaru 220 kV Circuit 1
AVI_WTK_1	Aviemore–Waitaki 220 kV Circuit 1
BPE_BRK_1	Bunnythorpe–Brunswick 220 kV Circuit 1
BPE_BRK_2	Bunnythorpe–Brunswick 220 kV Circuit 2
BPE_TKU_1	Bunnythorpe–Tokaanu 220 kV Circuit 1
BPE_TKU_2	Bunnythorpe–Tokaanu 220 kV Circuit 2
CYD_CB_522	Clyde 220 kV Line Circuit Breaker 522
CYD_CB_542	Clyde 220 kV Line Circuit Breaker 542
CYD_CML_TWZ_1	Clyde–Cromwell Twizel 220 kV Circuit 1
CYD_CML_TWZ_2	Clyde–Cromwell Twizel 220 kV Circuit 2
CYD_ROX_1	Clyde–Roxburgh 220 kV Circuit 1
CYD_ROX_2	Clyde–Roxburgh 220 kV Circuit2
HAM_KPO_1	Hamilton–Karapiro 110 kV Circuit 1
HAM_KPO_2	Hamilton–Karapiro 110 kV Circuit 2
HAM_OHW_1	Hamilton–Ohinewai 220 kV Circuit 1
HAM_T6	Hamilton 220/110 kV Transformer T6
HAM_T9	Hamilton 220/110 kV Transformer T9
HAM_WKM_1	Hamilton–Whakamaru 220 kV Circuit 1
HAY_T1	Haywards 220/110/11 kV Transformer T1
HAY_T2	Haywards 220/110/11 kV Transformer T2
HAY_T5	Haywards 220/110/11 kV Transformer T5
HLY_SFD_1	Huntly–Stratford 220 kV Circuit 1
HLY_TWH_1	Huntly–Te Kowhai 220 kV Circuit 1
HWA_SFD_1	Hawera–Stratford 110 kV Circuit 1
ISL_KIK_1	Islington–Kikiwa 220 kV Circuit 1
ISL_LIV_1	Islington–Livingstone 220 kV Circuit 1
ISL_T3	Islington 220/66/11 kV Interconnecting Transformer T3
ISL_T6	Islington 220/66/11 kV Interconnecting Transformer T6
ISL_T7	Islington 220/66/11 kV Interconnecting Transformer T7
ISL_TKB_1	Islington–Tekapo B 220 kV Circuit 1
ISL_WPR_CUL_KIK_2	Islington–Waipara–Culverden Kikiwa 220 kV Circuit 2
ISL_WPR_CUL_KIK_3	Islington–Waipara–Culverden Kikiwa 220 kV Circuit 3
KAW_T12	Kawerau 220 /110 kV Interconnecting Transformer T12
KAW_T13	Kawerau 220 /110 kV Interconnecting Transformer T13
KIK_CB_322	Kikiwa 220 kV Line Circuit Breaker 322
KIK_CB_342	Kikiwa 220 kV Line Circuit Breaker 342

<b>Asset name</b>	<b>Outage Block Description (circuit)</b>
KIN_CB_352	Kinleith 110kV Circuit Breaker 352
KIN_CB_372	Kinleith 110kV Circuit Breaker 372
KIN_TRK_1	Kinleith–Taurakenga 110 kV Circuit 1
KIN_TRK_2	Kinleith–Taurakenga 110 kV Circuit 2
LIV_NSY_1	Livingstone–Naseby 220 kV Circuit 1
LIV_WTK_1	Livingstone–Waitaki 220 kV Circuit 1
MAN_220BS_A	Manapouri 220 kV Bus A
MAN_220BS_B	Manapouri 220 kV Bus B
MAN_220BS_C	Manapouri 220 kV Bus C
NPL_T8	New Plymouth 220/110 kV Interconnecting Transformer T8
NSY_ROX_1	Naseby–Roxburgh 220 kV Circuit 1
OHK_WRK_1	Ohakuri–Wairakei 220 kV Circuit 1
OHW_WKM_1	Ohinewai–Whakamaru 220 kV Circuit 1
PAK_WKM_1	Pakuranga–Whakamaru 220 kV Circuit 1
PAK_WKM_2	Pakuranga–Whakamaru 220 kV Circuit 2
RDF_T3	Redclyffe 220/110 kV Interconnecting Transformer T3
RDF_T4	Redclyffe 220/110 kV Interconnecting Transformer T4
RPO_TNG_1	Rangip–Tangiwai 220 kV Circuit 1
RPO_WRK_1	Rangipo–Wairakei 220 kV Circuit 1
SFD_T10	Stratford 220 / 110 kV Interconnecting Transformer T10
SFD_TMN_1	Stratford–Taumarunui 220 kV Circuit 1
THI_WKM_1	Te Mihi–Whakamaru 220 kV Circuit 1
THI_WRK_1	Te Mihi–Wairakei 220 kV Circuit 1
TKB_TWZ_1	Tekapo B Twizel 220 kV Circuit 1
TKU_WKM_1	Tokaanu–Whakamaru 220 kV Circuit 1
TKU_WKM_2	Tokaanu–Whakamaru 220 kV Circuit 2
TMN_TWH_1	Taumarunui–Te Kowhai 220 kV Circuit 1
WKM_WRK_1	Whakamaru–Wairakei 220 kV Circuit 1



### Schedule H: Pass-through costs and recoverable costs summary

Item	Formula	Description
[Column 1]	[Column 2]	[Column 3]
Local authority rates	A	Rates payable to a local authority on system fixed assets
Commerce Act levies	B	Levies payable to the <b>Commission</b>
Electricity Authority levies	C	Levies payable to the <b>Electricity Authority</b>
Utilities Disputes Limited levies	D	Levies payable by all members of the Energy Complaints Scheme operated by Utilities Disputes Limited being the approved scheme under Schedule 4 of the Electricity Industry Act 2010
<b>Total pass-through costs</b>	<b>E = A + B+ C+D</b>	Sum of <b>pass-through costs</b> for the <b>disclosure year</b>
<b>Incremental rolling incentive scheme recoverable costs</b>	F	Sum of <b>recoverable costs</b> under the <b>incremental rolling incentive scheme</b> in accordance with clause 3.1.3(1)(a) of the <b>Transpower IM</b>
Instantaneous reserves availability charge	G	Instantaneous reserves availability charges in accordance with clause 3.1.3(1)(b) of the <b>Transpower IM</b>
Transmission alternative <b>operating costs</b>	H	Transmission alternative <b>operating costs</b> in accordance with clause 3.1.3(1)(c) of the <b>Transpower IM</b>
<b>Operating costs</b> incurred as part of a <b>major capex project</b>	I	The amount of any <b>operating costs</b> that are <b>recoverable costs</b> in accordance with clause 3.1.3(1)(d) of the <b>Transpower IM</b>
Net additional <b>operating costs</b> incurred in responding to a <b>catastrophic event</b>	J	The amount of <b>recoverable costs</b> in accordance with clause 3.1.3(1)(e) of the <b>Transpower IM</b>
Any levy payable to Fire and Emergency New Zealand under the Fire and Emergency New Zealand Act 2017	K	The amount of <b>recoverable costs</b> in accordance with clause 3.1.3(1)(f) of the <b>Transpower IM</b>
<b>Total recoverable costs</b>	<b>L = F + G + H + I + J + K</b>	Sum of <b>recoverable costs</b> for the <b>disclosure year</b>
<b>Total pass-through costs and recoverable costs</b>	<b>M = E + L</b>	Sum of total <b>pass-through costs</b> and <b>recoverable costs</b> for the <b>disclosure year</b>

**Schedule I: Listed projects**

Line Name (Section)	Project Estimated Cost
	<b>RCP3 (\$m)</b>
Brunswick - Stratford B reconductoring	52.8
Bunnythorpe - Wilton A reconductoring (BPE–JFD section)	21.2
Bombay - Otahuhu A reconductoring	49.5
Otahuhu - Whakamaru A and B reconductoring	33.0
Total estimated cost	156.5

**Schedule J: Directors' certificate – pricing compliance statement**

We, [insert full name of first director] and [insert full name of second director], being directors of Transpower New Zealand Limited, certify that, having made all reasonable enquiries, to the best of our knowledge and belief, the attached summary of forecast total revenues applied in the Transpower transmission pricing methodology under the Electricity Industry Participation Code for the pricing year commencing [insert pricing year] complies with the requirements of the Transpower Individual Price-Quality Path Determination 2020 \*[except in the following respects].

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

[Signatures of directors]

[Date]

\*Delete if inapplicable.

**Schedule K: Directors' certificate – annual compliance statement and forecast SMAR**

We, [insert full name of first director] and [insert full name of second director], being directors of Transpower New Zealand Limited, certify that, having made all reasonable enquiries, to the best of our knowledge and belief, the Annual Compliance Statement (and any supporting documents) and any required update of the forecast SMAR for the period [insert disclosure year] and dated [insert date] complies with the requirements of the Transpower Individual Price-Quality Path Determination 2020\*[except in the following respects].

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

[Signatures of directors]

[Date]

\*Delete if inapplicable.

## Explanatory note

The Transpower Individual Price-Quality Path Draft Determination 2020 [2019] NZCC XX (the Transpower IPP) sets an individual price-quality path for Transpower New Zealand Limited (Transpower) for the period 1 April 2020 to 31 March 2025 (referred to as 'RCP3'). The Commission has made this determination pursuant to Part 4 of the Commerce Act 1986 (the Act). It succeeds the individual price-quality path that commenced on 1 April 2015 and that expires on 31 March 2020.

The Transpower IPP sets out Transpower's price path in terms of its annual maximum allowable revenue (being the forecast smoothed maximum allowable revenue) for each pricing year in RCP3. Key input values used to calculate Transpower's annual maximum allowable revenue were determined by the Commission in August 2019 as required by the *Transpower Capital Expenditure Input Methodology Determination* [2012] NZCC 2.

The Transpower IPP also sets out the quality standards that Transpower must comply with for each disclosure year in the regulatory period. Transpower is incentivised to maintain or improve its quality of supply of electricity transmission services, as a range of quality standards are linked by formulae to Transpower's revenue.

For the purposes of monitoring compliance with Transpower's price-quality path, Transpower must provide the Commission each pricing year with a pricing compliance statement and an annual compliance statement (and associated information) following each disclosure year ending 30 June. The Transpower IPP also requires Transpower to publicly disclose other information on its website. These information disclosure requirements are included within the Transpower IPP (rather than the *Transpower Information Disclosure Determination 2014* [2014] NZCC 5) because they give effect to an operational feature of the price-quality path, or are linked to Transpower's development plans for RCP3, rather than being enduring disclosures.

The Commission conducted a comprehensive process of consultation before determining this Transpower IPP. The determination and a reasons paper providing detailed background to, and analysis of, this Transpower IPP can be found at:

[\[insert hyperlink\]](#)

Copies of this determination are available for inspection free of charge at the Commission (during ordinary office hours), on the Commission's website at the above link, and are available for purchase at a reasonable price at the Commission.