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

# [2019] NZCC [XX]

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**Commerce Commission** 

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

## **Part 1: General provisions**

#### 1. <u>Title</u>

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. <u>Interpretation</u>

- 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 at the time it is applied, 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. <u>Individual price-quality path and information disclosures</u>
  - 5.1 **Transpower** must comply with the individual price-quality path, which consists of:
    - 5.1.1 the price path in Part 3;
    - 5.1.2 the quality standards in clauses 14.1-14.4, 16.1-16.4, 17.1, 18.1 and 21.1; and
    - 5.1.3 the grid output measures in clause 11.
  - 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. <u>In this determination, unless the context otherwise requires:</u>

Α

Act	means the Commerce Act 1986;
actual opex	has the meaning given in the <b>Transpower IM</b> ;
actual transmission revenue	means the revenue received by <b>Transpower</b> in a <b>pricing year</b> for <b>electricity transmission services</b> ;
AHI	means <b>Transpower's</b> asset health assessment for the relative health of an asset in the range between 1 and 10, where an index of 1 denotes best condition and an index of 10 denotes worst condition;
annual compliance statement	means a written statement made by <b>Transpower</b>

under clause 23 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;

#### asset health measure asset class

means an asset class that is subject to the asset health quality standards and is one of the following:

- (a) power transformers;
- (b) outdoor circuit breakers;

#### asset performance measure

has the meaning given in the **Capex IM** and, for the purposes of this determination:

- (a) the **revenue-linked grid output measures** specified in clause 11.3; and
- (b) the non-revenue linked **grid output measures** described in clauses 25.1.2 to 25.1.4.

#### assurance auditor

means a person who:

- is qualified for appointment as auditor of a company under the Companies Act 1993;
- (b) complies with Professional and Ethical Standard 1 (PES 1) issued by the New Zealand Auditing and Assurance Standards Board of the External Reporting Board in December 2018, under s 12(b) of the Financial Reporting Act 2013; and
- (c) for the avoidance of doubt:
  - (i) has no input into either
    Transpower's proposed updated
    forecast MAR and forecast
    SMAR calculations for a pricing
    year of RCP3 or an annual
    compliance statement for a
    disclosure year of RCP3 (other
    than in relation to independent
    assurance reports); and
  - (ii) is not associated with or directed by any person who has provided any such input;

В

base capex has the meaning given in the Capex IM; base capex allowance has the meaning given in the Capex IM; base capex expenditure has the meaning given in the Capex IM; adjustment base capex incentive rates means the base capex low incentive rate and base capex standard incentive rate; base capex low incentive rate has the meaning given in the Capex IM; base capex programme has the meaning given in the Capex IM; base capex project has the meaning given in the Capex IM; base capex standard incentive rate has the meaning given in the Capex IM; C has the meaning given in the Capex IM and, for cap the purposes of this determination, values are specified in Tables 4.1 and 4.2; Capex IM means the Transpower Capital Expenditure Input Methodology Determination [2012] NZCC 2, including, for the avoidance of doubt, any amendment applicable to RCP3; has the meaning given in the Capex IM; capital expenditure or capex catastrophic event has the meaning specified in clause 3.7.1 of the Transpower IM; civil commotion means riots or similar civil disturbance; code has the meaning given in the **Transpower IM**; collar has the meaning given in the Capex IM and, for the purposes of this determination, values are specified in Tables 4.1 and 4.2; Commission has the meaning given in the Act;

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

commissioned

commodity instrument that is not an effective hedge

means an instrument acquired by or entered into by **Transpower** in accordance with its policy on **capital expenditure** hedging in respect of an exposure to commodity prices, and the instrument does not qualify for hedge accounting in accordance with **GAAP** 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;

**contamination** means radioactive contamination, toxic

contamination, dangerous biological

contamination or chemical contamination;

corporate tax rate has the meaning given in the Transpower IM;

**CPI** has the meaning given in the **Capex IM**;

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

**customer service measure** means a reporting measure for disclosure of the

timeliness of communications and information provided to affected **customers** after an

interruption event;

D

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

director has the meaning given in the Capex IM;

disclosure year has the meaning given in the Transpower IM and,

in relation to a **pricing year**, is the year

commencing 1 July immediately following the

start of that pricing year;

disposed asset has the meaning given in the Transpower IM;

**duration** means the elapsed time of an **unplanned** 

**interruption** (in minutes, rounded to the nearest whole minute) from the start of that **unplanned** 

**interruption** until the earlier of:

(a) restoration; or

(b) seven days after that unplanned

#### interruption commenced;

Ε

**Electricity Authority** 

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

electricity transmission services electricity lines services

has the meaning given in the **Capex IM**; has the meaning given in section 54C of the **Act**;

**EV** account

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

EV account entry

means, for a **disclosure year**, a memorandum entry to record for that **disclosure year**:

- (a) an ex-post economic gain or loss;
- (b) an after-tax gain or loss on capital expenditure commitments;
- (c) an after-tax economic gain or loss calculated for a base capex expenditure adjustment, grid output adjustment, or major capex expenditure and output adjustment;
- (d) an after-tax economic gain or loss calculated for a major capex sunk costs adjustment;
- (e) an **ex-post economic gain or loss** calculated in accordance with clause 31.1.3(a); or
- (f) an after-tax gain or loss calculated in accordance with clauses 31.1.3(b) and 31.1.3(c);

ex-post economic gain or loss

means, for a **disclosure year**, the after tax difference (expressed as a positive or negative amount) between the capital charge and the net operating profit/(loss) after tax for that **disclosure year**, as calculated in accordance with clause 29.1;

F

forecast CPI

has the meaning given in the Capex IM;

forecast EV adjustment

has the meaning given in the **Transpower IM** and, where the **Commission** reconsiders and amends **Transpower's IPP** in accordance with clause 3.7.5(3) of the **Transpower IM**, is the amount calculated for each **pricing year** in accordance with clauses 32.2 and 32.3 and Schedule D, Formula I (Forecast EV adjustment);

forecast FX rate

has the meaning given in the Capex IM;

forecast MAR

has the meaning given in the **Transpower IM** and for each **pricing year**, is:

- (a) the amount set out in Column 8 in Schedule A; or
- (b) where the Commission reconsiders and amends Transpower's IPP in accordance with the Transpower IM, as calculated in accordance with clause 30.1 and Schedule D;

forecast opex

has the meaning given in the Transpower IM;

forecast SMAR

has the meaning given in the **Transpower IM** and, for each **pricing year**, is:

- (a) the amount set out in Column 9 in Schedule A; or
- (b) where the Commission reconsiders and amends Transpower's IPP in accordance with the Transpower IM, as calculated in accordance with clauses 8.3 and 30.3;

found asset

has the meaning given in the Transpower IM;

G

**GAAP** 

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

gain or loss on capital expenditure commitments

means a gain or loss required under **GAAP** to be recognised in profit or loss in **Transpower's**Statement of Comprehensive Income in respect of:

(a) foreign currency **capital expenditure** commitments and associated designated hedges; and

(b) commodity hedge instruments;

**good electricity industry practice** has the meaning given in Part 1 of the **code**;

grid has the meaning given in the Capex IM;

grid output has the meaning given in the Capex IM;

grid output adjustment has the meaning given in the Capex IM;

grid output incentive rate has the meaning given in the Capex IM and, for

the purposes of this determination, the rates for revenue-linked grid output measures are

specified in Tables 4.1 and 4.2;

grid output measure has the meaning given in the Capex IM;

grid output target has the meaning given in the Capex IM and, for

the purposes of this determination, the targets for

revenue-linked grid output measures are

specified in Tables 4.1 and 4.2;

Н

**HVAC** means high voltage alternating current;

**HVAC transmission revenue** means revenue (net of rebates) received by

**Transpower** from **customers** in respect of the use

by Transpower of Transpower's HVAC

transmission system for the purpose of providing electricity transmission services to customers;

**HVDC** means high voltage direct current;

**HVDC pole** means an **HVDC** system circuit between Benmore

and Haywards comprising the converter stations at Benmore and Haywards and the **HVDC** 

transmission circuit between them, carried on **HVDC** overhead line and undersea cable,

connecting the converter stations;

**HVDC transmission revenue** means revenue (net of rebates) received by

**Transpower** from **customers** in respect of the use

by Transpower of Transpower's HVDC

transmission system for the purpose of providing electricity transmission services to customers;

ı

IMs means the Transpower IM and the Capex IM

taken together;

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

Incremental rolling incentive scheme (or IRIS)

means the incentive scheme specified in Part 3, subpart 6 of the **Transpower IM**;

independent assurance report means a report issued by an assurance auditor on an annual compliance statement in accordance

with clause 34;

instrument that ceases to be an effective hedge

means a financial instrument entered into or acquired by **Transpower** in accordance with its policy on **capital expenditure** hedging that qualifies as an effective hedge at the date of entering into or acquiring the instrument, but that ceases during the **disclosure year** to qualify for hedge accounting in accordance with **GAAP**, 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;

**interruption** means the cessation of conveyance of electricity

between **grid** assets owned by **Transpower** to the assets owned or operated by a **customer** at a

point of service to the grid;

**IPP revenue growth rate** means the maximum allowable annual percentage

growth in **forecast SMAR** for each **pricing year** as

set out in clause 8.4;

L

large buildup in EV account

balance

has the meaning given in clause 3.7.3A of the

Transpower IM;

listed project has the meaning given in the Capex IM;

lost asset has the meaning given in the Transpower IM;

low incentive rate base capex

allowance

has the meaning given in the Capex IM;

M

major capex	has the meaning given in the Capex IM;
major capex expenditure and output adjustment	has the meaning given in the Capex IM;
major capex incentive rate	has the meaning given in the Capex IM;
major capex project	has the meaning given in the Capex IM;
major capex proposal	has the meaning given in the Capex IM;
major capex sunk costs adjustment	has the meaning given in the Capex IM;
measure of grid performance	has the meaning given in the <b>Capex IM</b> and, for the purposes of this determination, the measures for <b>revenue-linked grid output measures</b> are specified in clause 11;
momentary interruption	means an <b>interruption</b> that is not planned, which has a <b>duration</b> of less than one minute;
	N
	N
natural disaster	means an event caused by forces beyond human control, including without limitation:
natural disaster	means an event caused by forces beyond human
natural disaster	means an event caused by forces beyond human control, including without limitation:
natural disaster	means an event caused by forces beyond human control, including without limitation:  (a) earthquakes;
natural disaster	means an event caused by forces beyond human control, including without limitation:  (a) earthquakes;  (b) landslips;
natural disaster	means an event caused by forces beyond human control, including without limitation:  (a) earthquakes;  (b) landslips;  (c) floods;  (d) severe weather events, including storms,
natural disaster	means an event caused by forces beyond human control, including without limitation:  (a) earthquakes;  (b) landslips;  (c) floods;  (d) severe weather events, including storms, wind and rain;
natural disaster  new investment contract	means an event caused by forces beyond human control, including without limitation:  (a) earthquakes; (b) landslips; (c) floods; (d) severe weather events, including storms, wind and rain; (e) tsunamis; and
	means an event caused by forces beyond human control, including without limitation:  (a) earthquakes; (b) landslips; (c) floods; (d) severe weather events, including storms, wind and rain; (e) tsunamis; and (f) volcanic and hydrothermal activity;
new investment contract	means an event caused by forces beyond human control, including without limitation:  (a) earthquakes; (b) landslips; (c) floods; (d) severe weather events, including storms, wind and rain; (e) tsunamis; and (f) volcanic and hydrothermal activity; has the meaning given in the <b>Transpower IM</b> ;

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**; or
- (b) calculating the ex-post economic gain or loss;

opex incentive amount

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

other regulated income

means income associated with the supply of electricity transmission 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) of less than one minute in duration;
- (b) at the request of, or caused by, a customer; and
- (c) due to correct operation of Transpower's assets, caused by events in a customer's assets;

Ρ

pass-through costs

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

point of service

has the meaning set out in Part 1, clause 1.1(1) of the **code**;

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 measure of grid performance 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 measure of grid performance 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 22;

Pole 2 means one of Transpower's HVDC poles;

Pole 3 means one of Transpower's HVDC poles;

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

programme has the meaning given in the Capex IM;

project has the meaning given in the Capex IM;

Project k

means the Pole 2 life-extension project planned

by Transpower in RCP3;

publicly disclose (or public
disclosure)

means to make available to the public on **Transpower's** website and to notify the **Commission** that it has been made available;

R

RCP2

means the **regulatory period** prior to **RCP3**, being the period from 1 April 2015 to 31 March 2020, provided that references to the final **disclosure year** in **RCP2** means the **disclosure year** ending on 30 June 2020;

RCP3

means the **regulatory period** from 1 April 2020 to 31 March 2025, provided that references to the final **disclosure year** in **RCP3** means the **disclosure year** ending on 30 June 2025;

recoverable cost

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

regulatory period

means a period determined by the **Commission** under the **Act**, during which a particular individual price-quality path determination applies to **Transpower**, including but not limited to **RCP2** or **RCP3**;

regulatory tax allowance

means the tax allowance determined in accordance with clause 3.4.1 of the **Transpower IM**;

related party

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

relevant pricing year

in relation to a **disclosure year**, means the **pricing year** commencing on 1 April immediately before the start of that **disclosure year**;

restoration

to a customer, means the earliest of:

- (a) for generators:
  - (i) when the generator circuit breaker is closed; or
  - (ii) the generator is notified that **Transpower** equipment has been

- returned to service and is available for generation to be reconnected; or
- (iii) operational control for connecting the **Transpower** assets is returned to the generator; and
- (b) for **customers** other than generators:
  - (i) when the first feeder is closed, if feeder circuit breakers have been opened; or
  - (ii) when the supply bus is relivened, if feeder circuit breakers have remained closed after the interruption; or
  - (iii) when 75% of the load is returned to service by way of a backfeed within the customer's system or by generators; or
  - (iv) when Transpower has readied all its equipment and has made reasonable efforts to advise the customer that the equipment can be returned to service;

revenue-linked grid output measure

has the meaning given in the Capex IM;

S

standard incentive rate base capex allowance

has the meaning given in the Capex IM;

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**;

#### third party

means not a **related party** and excludes, for the avoidance of doubt, an employee or party contracted by **Transpower** to provide **electricity lines services**;

**TPM** 

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

**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:

- (a) any unplanned interruptions originating on another party's system and where the Transpower grid operated correctly;
- (b) any unplanned interruptions to the auxiliary load used by electricity generator assets; and
- (c) for all **point of service sub- categories** other than GP1E, GP1F,
  GP2E, and GP2F:
  - a. load restrictions achieved completely by the use of controllable load, interruptible load or demand-response;
  - b. automatic under-frequency load-shedding; and
  - unplanned interruptions for which all load is supplied by a backfeed or by embedded

generation;

٧

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;

work stoppage means a temporary cessation of work as a

form of protest, including without limitation a strike or lockout; and

works under construction has the meaning given in the Transpower

IM.

## Part 3: Price path

#### 8. Maximum revenues

- The maximum revenue that **Transpower** may recover for **electricity transmission** services for each pricing year is the **forecast SMAR** for that pricing year.
- 8.2 The forecast revenue for **electricity transmission services**, including **pass-through costs** and **recoverable costs** passed on to any **customer**, that **Transpower** uses for setting transmission charges under the **TPM** for the **pricing year** must not exceed the **forecast SMAR**.
- 8.3 For the purpose of clause 8.1, an update of the 'forecast SMAR' is calculated by
  - 8.3.1 inputting building block values for each **disclosure year** of the **regulatory period** into Schedule D;

- 8.3.2 converting the **forecast MAR** building blocks to **pricing year** values by applying the cash flow timing factors in 'Column 4' of Schedule D; and
- 8.3.3 converting the **forecast MAR** to the **forecast SMAR** for each **pricing year** using the methodology set out in clause 3.1.1(3)(b)-(d) of the **Transpower IM**.
- The IPP revenue growth rate for each pricing year of RCP3 is [1.0%].
- 8.5 Where **Transpower** applies to the **Commission** to reconsider **Transpower's IPP** for the purposes of clauses 3.7.4(1) or 3.7.4(4) of the **Transpower IM**, **Transpower** must:
  - 8.5.1 provide to the **Commission** no later than 80 **working days** after the end of the prior complete **disclosure year**, a proposed updated **forecast MAR** and proposed updated **forecast SMAR** for each of the remaining complete **pricing years** of **RCP3** in accordance with clause 30; and
  - 8.5.2 **publicly disclose** that proposed updated **forecast MAR** and **forecast SMAR** and, where applicable, the **forecast EV adjustment** amounts in accordance with clause 32.2.
- 8.6 For the purposes of clause 8.5, **Transpower** must apply the calculations required in clause 30 and Schedule D, and must include supporting information for its calculations.

#### 9. <u>Wash-up calculation</u>

- 9.1 For each disclosure year, Transpower must calculate an ex-post economic gain or loss in accordance with clause 29.
- 9.2 For the purposes of calculating an **ex-post economic gain or loss, Transpower** must convert the **actual transmission revenue** from a **pricing year** value to a **disclosure year** value in Schedule E, Formula H by applying the cash flow timing factor in 'Column 4' of Schedule E.

#### 10. <u>Listed projects</u>

- 10.1 The **projects** or **programmes** identified as **listed projects** for **RCP3** are set out in Schedule I.
- 10.2 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.

## Part 4: Quality standards and performance measures

- 11. Revenue-linked performance measures
  - 11.1 Subject to clause 20, for the purposes of calculating the **grid output adjustment** under clause 19 and the measures specified in Table 4.1 and Table 4.2, the **revenue-linked grid output measures** are:
    - 11.1.1 measures of grid performance specified in clause 11.2; and
    - 11.1.2 asset performance measures specified in clause 11.3;
  - 11.2 The **measures of grid performance** are:
    - 11.2.1 GP1, which measures the total number of **unplanned interruptions** for each **point of service sub-category** during a **disclosure year**; and
    - 11.2.2 GP2, which measures the average duration of unplanned interruptions for each point of service sub-category during a disclosure year.
  - 11.3 The asset performance measures are:
    - 11.3.1 AP1, which measures **HVDC** energy availability of **Pole 2** and **Pole 3** as a percentage of annual capacity during a **disclosure year**, as set out in Table 4.2 and as described in clauses 17.1 to 17.3. and
    - 11.3.2 AP2, which measures percentage of time that the **HVAC** assets listed in Schedule G are available during a **disclosure year**, as set out in Table 4.2 and as described in clauses 18.1 to 18.3.
- 12. Quality standards for revenue-linked grid output measures
  - 12.1 The point of service sub-category limits for each point of service sub-category of measures of grid performance GP1 and GP2 are identified in Table 4.1.
  - 12.2 The quality standards for **asset performance measures** AP1 and AP2 are identified in Table 4.2.
- 13. Requirement to calculate GP1 assessed values for first disclosure year of RCP3
  - 13.1 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 subcategory in Table 4.1 in accordance with clauses 14.6 to 14.11.
- 14. GP1 quality standard for remaining disclosure years of RCP3
  - 14.1 To comply with the GP1 quality standard for the **disclosure year** from 1 July 2021 to 30 June 2022, **Transpower** must either:
    - 14.1.1 comply with the **measure of grid performance** GP1 assessment specified in clause 14.5; or

- 14.1.2 have assessed values for four or more of the GP1 point of service subcategories 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 14.6 to 14.11.
- 14.2 To comply with the GP1 quality standard for the **disclosure year** from 1 July 2022 to 30 June 2023, **Transpower** must either:
  - 14.2.1 comply with the **measure of grid performance** GP1 assessment specified in clause 14.5; or

#### 14.2.2 have:

- (a) complied with the **measure of grid performance** GP1 assessment specified in clause 14.5 for the **disclosure year** from 1 July 2021 to 30 June 2022; and
- (b) assessed values for four or more of the GP1 point of service subcategories 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 14.6 to 14.11.
- 14.3 To comply with the GP1 quality standard for the **disclosure year** from 1 July 2023 to 30 June 2024, **Transpower** must either:
  - 14.3.1 comply with the **measure of grid performance** GP1 assessment specified in clause 14.5; or
  - 14.3.2 have complied with the **measure of grid performance** GP1 assessment specified in clause 14.5 in each of the two preceding **disclosure years** of **RCP3**.
- 14.4 To comply with the GP1 quality standard for the **disclosure year** from 1 July 2024 to 30 June 2025, **Transpower** must either:
  - 14.4.1 comply with the **measure of grid performance** GP1 assessment specified in clause 14.5; or
  - 14.4.2 have complied with the **measure of grid performance** GP1 assessment specified in clause 14.5 in each of the two preceding **disclosure years** of **RCP3**.
- 14.5 For the purposes of clauses 14.1 to 14.4, to comply with the **measure of grid**performance GP1 assessment, **Transpower's** assessed value for four 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.

14.6 Subject to clause 20, for the purposes of clause 13 and 14.5, **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**.

14.7 Subject to clause 20, for the purposes of clauses 13 and 14.5, **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**.

14.8 Subject to clause 20, for the purposes of clause 13 and 14.5, **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**.

14.9 Subject to clause 20, for the purposes of clause 13 and 14.5, **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**.

14.10 Subject to clause 20, for the purposes of clause 13 and 14.5, **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**.

14.11 Subject to clause 20, for the purposes of clause 12.2 and 14.5, **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**.

- 15. Requirement to calculate GP2 assessed values for first disclosure year of RCP3
  - 15.1 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 subcategory in Table 4.1 in accordance with clauses 16.6 to 16.11.

- 16. GP2 quality standard for remaining disclosure years of RCP3
  - 16.1 To comply with the GP2 quality standard for the **disclosure year** from 1 July 2021 to 30 June 2022, **Transpower** must either:
    - 16.1.1 comply with the **measure of grid performance** GP2 assessment specified in clause 16.5; or
    - 16.1.2 have assessed values for four or more of the GP2 point of service subcategories 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-categories in Table 4.1, as calculated in accordance with clauses 16.6 to 16.11.
  - To comply with the GP2 quality standard for the **disclosure year** from 1 July 2022 to 30 June 2023, **Transpower** must either:
    - 16.2.1 comply with the **measure of grid performance** GP2 assessment specified in clause 16.5; or
    - 16.2.2 have:
      - (a) complied with the **measure of grid performance** GP2 assessment specified in clause 16.5 for the **disclosure year** from 1 July 2021 to 30 June 2022; and
      - (b) assessed values for four or more of the GP2 point of service subcategories 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-categories in Table 4.1, as calculated in accordance with clauses 16.6 to 16.11.
  - 16.3 To comply with the GP2 quality standard for the **disclosure year** from 1 July 2023 to 30 June 2024, **Transpower** must either:
    - 16.3.1 comply with the **measure of grid performance** GP2 assessment specified in clause 16.5; or
    - 16.3.2 have complied with the **measure of grid performance** GP2 assessment specified in clause 16.5 in each of the two preceding **disclosure years** of **RCP3**.
  - 16.4 To comply with the GP2 quality standard for the **disclosure year** from 1 July 2024 to 30 June 2025, **Transpower** must either:
    - 16.4.1 comply with the **measure of grid performance** GP2 assessment specified in clause 16.5; or
    - 16.4.2 have complied with the **measure of grid performance** GP2 assessment specified in clause 16.5 in each of the two preceding **disclosure years** of **RCP3**.

- 16.5 For the purposes of clause 16.1 to 16.4, to comply with the measure of grid performance GP2 assessment, Transpower's assessed value for four 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 each of those measure of grid performance GP2 point of service sub-categories in Table 4.1.
- Subject to clause 20, for the purposes of clauses 15 and 16.5, **Transpower's** assessed value for **point of service sub-category** 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** GP2A commencing within the **disclosure year** divided by the total number of **unplanned interruptions** for the **point of service sub-category** GP2A commencing within the **disclosure year**.

16.7 Subject to clause 20, for the purposes of clauses 15 and 16.5, **Transpower's** assessed value for **point of service sub-category** 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** GP2B commencing within the **disclosure year** divided by the total number of **unplanned interruptions** for the **point of service sub-category** GP2B commencing within the **disclosure year**.

16.8 Subject to clause 20, for the purposes of clauses 15 and 16.5, **Transpower's** assessed value for **point of service sub-category** 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** GP2C commencing within the **disclosure year** divided by the total number of **unplanned interruptions** for the **point of service sub-category** GP2C commencing within the **disclosure year**.

Subject to clause 20, for the purposes of clauses 15 and 16.5, **Transpower's** assessed value for **point of service sub-category** 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** GP2D commencing within the **disclosure year** divided by the total number of **unplanned interruptions** for the **point of service sub-category** GP2D commencing within the **disclosure year**.

16.10 Subject to clause 20, for the purposes of clauses 15 and 16.5, **Transpower's** assessed value for **point of service sub-category** 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 GP2E commencing within the disclosure year divided by the total number of unplanned interruptions for the point of service sub-category GP2E commencing within the disclosure year.

16.11 Subject to clause 20, for the purposes of clauses 15 and 16.5, **Transpower's** assessed value for **point of service sub-category** 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 GP2F commencing within the disclosure year divided by the total number of unplanned interruptions for the point of service sub-category GP2F commencing within the disclosure year.

- 17. AP1 quality standard for each disclosure year of RCP3
  - 17.1 For each **disclosure year**, **Transpower** must comply with the **asset performance measure** AP1 quality standard as specified in clause 17.2.
  - 17.2 For the purpose of clause 17.1, to comply with the asset performance measure AP1 quality standard, the HVDC energy availability for Pole 2 and Pole 3 for the disclosure year as calculated in accordance with clause 17.3 must be higher than the AP1 quality standard value in Table 4.2.
  - 17.3 For the purposes of clause 17.2, subject to clause 17.4 and clause 20, the **HVDC** energy availability for **Pole 2** and **Pole 3** for the **disclosure year** is calculated as a percentage term in accordance with the formula:

$$100 - \frac{100 \sum_{j=1}^{N} (reduction\ in\ capacity\ due\ to\ \textit{outage}\ j)\ (duration\ of\ \textit{outage}\ j\ in\ hours)}{(maximum\ capacity\ of\ \textit{HVDC}\ poles)\ (total\ number\ of\ hours\ in\ the\ \textit{disclosure}\ \textit{year})}$$

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

17.4 For the purposes of clause 17.2 and subject to clause 20, for a maximum of three disclosure years of RCP3 during the life of Project k, the Project k adjustment may be added to the HVDC energy availability for Pole 2 and Pole 3 calculated in accordance with clause 17.3, where the Project k adjustment for each disclosure year is calculated in accordance with the formula:

**Project k** adjustment = the lesser of (0.7 or p)

where:

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

- 18. AP2 quality standard for each disclosure year of RCP3
  - 18.1 For each **disclosure year**, **Transpower** must comply with the **asset performance measure** AP2 quality standard as specified in clause 18.2.

- 18.2 For the purpose of clause 18.1, to comply with the **asset performance measure** AP2 quality standard, the percentage of the time that the **HVAC** assets listed in Schedule G are available during the **disclosure year**, as calculated in accordance with clause 18.3, must be higher than the AP2 quality standard value in Table 4.2.
- 18.3 For the purposes of clause 18.2, subject to clause 20, the percentage of the time that the **HVAC** assets are available during the **disclosure year** is calculated as a percentage term in accordance with the formula:
  - $100 \frac{100 \, (total \, duration \, (in \, hours) \, of \, all \, \textbf{outages} \, on \, the \, \textbf{HVAC} \, circuits \, listed \, in \, Schedule \, G)}{(number \, of \, \textbf{HVAC} \, circuits \, listed \, in \, Schedule \, G)(total \, number \, of \, hours \, in \, the \, \textbf{disclosure year})}$

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

Point of service sub- category	Сар	Grid output target	Collar	Point of service sub- category limit	Grid output Incentive rate	
GP1: number of interruptions (per annum)						
GP1A: N-1 security high economic consequence	0	7	14	14	335,714	
GP1B: N-1 security material economic consequence	7	24	41	41	40,294	
GP1C: N security high economic consequence	4	6	8	8	250,000	
GP1D: N security material economic consequence	9	23	37	37	41,786	
GP1E: N-1 security generator	5	9	13	13	62,500	
GP1F: N security generator	6	12	18	18	41,667	
GP2: average duration of int	erruption (mi	n)			\$ per minute	
GP2A: N-1 security high economic consequence	30	92	154	154	37,903	
GP2B: N-1 security material economic consequence	36	61	86	86	27,400	
GP2C: N security high economic consequence	0	103	206	206	4,854	
GP2D: N security material economic consequence	0	140	280	280	4,179	
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	Сар	Grid output target	Collar	Quality standard	Grid output Incentive rate
AP1: HVDC availability (%)					\$ per 1%
HVDC availability	99.75	98.75	97.75	96.75	500,000
AP2: HVAC availability (%)					\$ per 1%
HVAC availability (71 selected assets)	99.2	99.0	98.8	98.6	5,000,000

#### 19. The grid output adjustment

- 19.1 **Transpower** must calculate the **grid output adjustment** for each **disclosure year** for the **revenue-linked grid output measures**.
- 19.2 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.
- 19.3 For the purposes of calculating the **grid output adjustment**, the output achieved is:
  - 19.3.1 for each of the **point of service sub-categories** GP1A, GP1B, GP1C, GP1D, GP1E and GP1F, the total number of all **unplanned interruptions** commencing within the **disclosure year**;
  - 19.3.2 for each of the **point of service sub-categories** 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** commencing within the **disclosure year**;
  - 19.3.3 for asset performance measure AP1, subject to clause 19.3.4 and clause 20, the HVDC energy availability for Pole 2 and Pole 3 is calculated as a percentage term in the following manner:

$$100 - \frac{100 \sum_{j=1}^{N} (reduction\ in\ capacity\ due\ to\ \textbf{outage}\ j)\ (duration\ of\ \textbf{outage}\ j\ in\ hours)}{(maximum\ capacity\ of\ \textbf{HVDC\ poles})\ (total\ number\ of\ hours\ in\ the\ \textbf{disclosure\ year})}$$

where:

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

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

19.3.4 for **asset performance measure** AP2, subject to clause 20, the percentage term calculated as:

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

19.4 For the purposes of clause 19.3.3, subject to clause 20, 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 Pole 2 and Pole 3 calculated in accordance with clause 19.3.3, where the Project K adjustment for each disclosure year is calculated in accordance with the formula:

**Project k** adjustment = the lessor of (0.7 or p)

where:

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

#### 20. Normalisation

- Subject to clauses 20.3 and 20.4, an **interruption** or **outage** may be excluded from the calculations made under clauses 14.6-14.11 and 16.6-16.11 of **measures of grid performance** or the calculations made under clauses 17.3-17.4, 18.3, 19.3.3-19.3.4 and 19.4 of **asset performance measures** where the **Commission** is satisfied that a **normalisation event** has occurred.
- 20.2 A 'normalisation event' means an interruption or outage that
  - 20.2.1 was beyond the reasonable control of **Transpower**;
  - 20.2.2 **Transpower** did not cause, or materially contribute to, by any failure to exercise **good electricity industry practice**;
  - 20.2.3 had a duration of 24 hours or more, in circumstances where that duration was
    - (a) beyond the reasonable control of **Transpower**; and
    - (b) not caused, or materially contributed to, by any failure of
       Transpower to exercise good electricity industry practice; and
  - 20.2.4 was the result of:
    - (a) natural disaster;
    - (b) fire not caused by **Transpower** equipment failure;
    - (c) explosion not caused by **Transpower** equipment failure;

- (d) civil commotion;
- (e) terrorism;
- (f) malicious damage;
- (g) war (declared or undeclared);
- (h) revolution;
- (i) contamination;
- action or inaction by a court or government agency (including denial, refusal or failure to grant any authorisation, despite timely best endeavour to obtain an authorisation);
- (k) a work stoppage;
- (I) a dispute between an employer and employees;
- (m) work bans; or
- (n) acts or omissions (other than failure to pay money) of a third party that affect the ability of Transpower to prevent or minimise the interruption or outage.
- 20.3 For the purposes of determining whether a **normalisation event** has occurred in accordance with clause 20.2, **Transpower** must make a written application to the **Commission** no later than 105 **working days** from the end of a **disclosure year**, which provides:
  - 20.3.1 that **Transpower** considers a **normalisation event** has occurred in the **disclosure year**;
  - 20.3.2 reasons for why **Transpower** considers a **normalisation event** has occurred, including why it considers:
    - (a) the **interruption** or **outage** was beyond **Transpower's** reasonable control;
    - (b) the effect of the interruption or outage on the grid, including managing to a shorter duration than that which actually occurred, was beyond Transpower's reasonable control; and
    - (c) it exercised **good electricity industry practice** in relation to the cause and effects of the **interruption** or **outage**;
  - 20.3.3 supporting evidence for the reasons provided in accordance with clause 20.3.2, including, without limitation, information on the relevant design standards of any equipment involved in the **interruption** or **outage**;

- 20.3.4 proposed reassessed values of any calculations made under clauses 14.6-14.11 and 16.6-16.11 of measures of grid performance or calculations made under clauses 17.3-17.4, 18.3, 19.3.3-19.3.4 and 19.4 of asset performance measures that are relevant to Transpower's written application in circumstances where the interruption or outage is excluded from those measures in accordance with clause 20.1; and
- 20.3.5 any other information that Transpower considers is relevant to its application.
- Where the **Commission** is satisfied that a **normalisation event** has occurred, the **Commission** shall:
  - 20.4.1 give or post notice to **Transpower**, which describes:
    - (a) the interruption or outage that is excluded as a normalisation event;
    - (b) reasons for why the Commission has excluded that normalisation event; and
    - (c) what calculations made under clauses 14.6-14.11 and 16.6-16.11 of measures of grid performance or calculations made under clauses 17.3-17.4, 18.3, 19.3.3-19.3.4 and 19.4 of asset performance measures are affected as a result of (a); and
  - 20.4.2 **publicly disclose** that the **normalisation event** has been excluded from those calculations.
- 21. Quality standards where grid output measures not linked to revenue
  - 21.1 For each **disclosure year**, **Transpower** must comply with the **asset health measure** AH quality standard, which measures the percentage of assets with **AHI** of 8 or greater for each **asset health measure asset class** described in clauses 21.3 to 21.4 and Table 4.3.
  - 21.2 For the purposes of clause 21.1, 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.
  - 21.3 For the purposes of clause 21.2, **Transpower's** assessed value for the power transformers **asset health measure asset class** for each **disclosure year** is calculated in accordance with the formula:

Power transformers assessed value =

 $\frac{\textit{the sum of all power transformer assets with an \textbf{AHI of 8 or higher}}}{\textit{the sum of all power transformer assets}} \; x \; 100$ 

21.4 For the purposes of clause 21.2, **Transpower's** assessed value for the outdoor circuit breakers **asset health measure asset class** for each **disclosure year** is calculated in accordance with the formula:

Outdoor circuit breakers assessed value =

 $\frac{\textit{the sum of all outdoor circuit breaker assets with an \textbf{AHI of 8 or higher}}{\textit{the sum of all outdoor circuit breaker assets}}$ 

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

Asset health measure asset class	2020/2021 (%)	2021/2022 (%)	2022/2023 (%)	2023/2024 (%)	2024/2025 (%)
Power transformers	3.22	3.68	5.37	8.65	12.03
Outdoor circuit breakers	2.00	2.37	5.65	7.63	8.27

# Part 5: Compliance and information reporting

- 22. <u>Pricing compliance statement</u>
  - 22.1 No later than five **working days** after **Transpower** announces, or amends, its forecast revenue for the purpose of setting or resetting charges under the **TPM** for a **pricing year**, **Transpower** must:
    - 22.1.1 provide to the **Commission** a written statement (the **pricing compliance statement**); and
    - 22.1.2 publicly disclose the pricing compliance statement.
  - 22.2 The **pricing compliance statement** must:
    - 22.2.1 state whether or not **Transpower** has complied with the price path in Part 3 for the **pricing year**;
    - 22.2.2 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**;
    - 22.2.3 if **Transpower** has not complied with the price path in Part 3 for the **pricing year**, disclose:
      - (a) each requirement in Part 3 that is not complied with; and
      - (b) the reasons for non-compliance in each case;
    - 22.2.4 state the date on which the **pricing compliance statement** was prepared; and

22.2.5 include a certificate in the form set out in Schedule J signed by at least two directors of Transpower.

#### 23. Annual compliance statement

- 23.1 Subject to clause 27, no later than 105 working days after the end of each disclosure year, Transpower must:
  - 23.1.1 provide to the **Commission** a written statement (the **annual compliance statement**); and
  - 23.1.2 publicly disclose the annual compliance statement and accompanying independent assurance report.
- 23.2 The annual compliance statement must:
  - 23.2.1 state whether or not **Transpower** has:
    - (a) complied with the quality standards in clauses 14.1-14.4, 16.1-16.4, 17.1, 18.1 and 21.1;
    - (b) 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;
    - (c) complied with requirements related to **grid output adjustment** calculations and **public disclosure**; and
    - (d) complied with requirements related to wash-up calculations and public disclosure;
  - 23.2.2 provide the information reasonably necessary to demonstrate compliance with the quality standards in clauses 14.1-14.4, 16.1-16.4, 17.1, 18.1 and 21.1;
  - 23.2.3 if **Transpower** has not complied with any quality standards in clauses 14.1-14.4, 16.1-16.4, 17.1, 18.1 and 21.1, disclose:
    - (a) each requirement and quality standard that is not complied with; and
    - (b) the reasons for non-compliance in each case;
  - 23.2.4 include information on performance against the following performance measures:
    - for measure of grid performance GP1: the assessed value and the point of service sub-category limit for each point of service subcategory 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 subcategory 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 asset performance measure AP1: Transpower's HVDC energy availability for the Pole 2 and Pole 3 for the disclosure year, and the quality standard for the disclosure year;
- (f) for asset performance measure AP1: the cap, collar and grid output target for the disclosure year;
- (g) for asset performance measure AP2: the percentage of the time that Transpower's HVAC assets listed in Schedule G are available during the disclosure year, and the quality standard for the disclosure year;
- (h) for asset performance measure AP2: the cap, collar and grid output target for the disclosure year;
- for asset health measure AH: the assessed value and the quality standard for each asset health measure asset class for the disclosure year;
- 23.2.5 state the date on which the **annual compliance statement** was prepared;
- 23.2.6 include a certificate in the form set out in Schedule K, signed by at least two directors of Transpower; and
- 23.2.7 be accompanied by an **independent assurance report** procured and prepared in accordance with clause 34.
- 24. Annual compliance statement information required
  - 24.1 The annual compliance statement for a disclosure year must include:
    - 24.1.1 the **ex-post economic gain or loss** for the **disclosure year**, calculated in accordance with clause 29.1 and Schedule E, including any supporting information;
    - 24.1.2 the forecast revenue for **electricity transmission services**, including **pass-through costs** and **recoverable costs** passed on to any **customer**, that **Transpower** used for setting charges under the **TPM** for the **relevant pricing year**;
    - 24.1.3 the HVAC transmission revenue for the relevant pricing year;
    - 24.1.4 the HVDC transmission revenue for the relevant pricing year;

- 24.1.5 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;
- 24.1.6 an updated summary of the **EV account** as set out in Schedule B and an updated forecast **EV account** balance at the end of **RCP3**, where these are supported by the further information required in clause 31.1, and where the **EV account entries** are calculated in accordance with clause 31.2;
- 24.1.7 a summary of **pass-through costs** and **recoverable costs** as set out in Schedule H, including:
  - (a) a description and explanation of any **operating costs** incurred as part of a **major capex project**; and
  - (b) a summary of any prudent net additional **operating costs** incurred in responding to a **catastrophic event**;
- 24.1.8 an explanation for the difference between the **forecast opex** and **actual opex**, including in each forecast and actual total the operating lease payments otherwise capitalised in accordance with the **Transpower IM**, and that are applied in the calculation of the **opex incentive amount** for that **disclosure year**;
- 24.1.9 updated summaries of the approved **base capex** as set out in Schedules C1 to C4;
- 24.1.10 details of any changes to **Transpower's** policy of hedging **capital expenditure** during the **disclosure year**; and
- 24.1.11 where a **normalisation event** is excluded from the calculation of assessed values of **revenue-linked grid output measures** in accordance with clause 20.4 for a **disclosure year**, a description of the adjustment to the **EV account** to reflect the effect on the **grid output adjustment** for that **disclosure year**.
- 25. <u>Information to accompany the annual compliance statement</u>
  - 25.1 **Transpower** must **publicly disclose** the following additional information at the same time as its **annual compliance statement** for the following performance measures:
    - 25.1.1 for 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;
    - 25.1.2 for asset performance measure AP3, which measures the extent to which Transpower meets estimated return to service times for planned outages of the HVAC assets set out in Schedule G: identify those assets 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:
- 25.1.3 for 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 assets set out in Schedule G for assets 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;
- 25.1.4 for asset performance measure AP5, which measures the extent that Transpower has placed customers on a reduced level of supply security, with that reduced level being N-security of supply: the extent that Transpower has placed customers on N-security of supply, including:
  - (a) when this has occurred;
  - (b) how much notice **Transpower** provided to **customers** before it occurred;
  - (c) how long **customers** were reduced to N-security of supply; and
  - (d) the **points of service** affected by the reduced N-security of supply;
- 25.1.5 **customer service measure** CS1, which relates to the timeliness of post**interruption** event communication and information provided to affected **customers**: the results of post-**interruption** event surveys of **customers** affected by **interruptions**.

#### 26. Periodic reporting for performance events

- 26.1 Subject to clause 27, 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**:
  - 26.1.1 the cause of the **unplanned interruption**;
  - 26.1.2 the start date and time of the **unplanned interruption**;
  - 26.1.3 the end date and time of the **unplanned interruption**;
  - 26.1.4 the megawatts affected by the **unplanned interruption**;
  - 26.1.5 the **grid** exit point(s) and **grid** injection point(s) affected by the **unplanned interruption**;
  - 26.1.6 actions **Transpower** took to minimise the effect of the **unplanned interruption**; and

- 26.1.7 lessons **Transpower** has learned as a result of the **unplanned interruption**.
- 26.2 Subject to clause 27, for each **interruption** during a **disclosure year** over one system minute, **Transpower** must **publicly disclose** within 42 **working days** of the **interruption**:
  - 26.2.1 the cause of the **interruption**;
  - 26.2.2 the start date and time of the **interruption**;
  - 26.2.3 the end date and time of the **interruption**;
  - 26.2.4 the megawatts affected by the **interruption**;
  - 26.2.5 the grid exit point(s) and grid injection point(s) affected by the interruption;
  - 26.2.6 actions **Transpower** took to minimise the effect of the **interruption**; and
  - 26.2.7 lessons **Transpower** has learned as a result of the **interruption**.

### 27. Extension of reporting time limits

- 27.1 For the purposes of clauses 23.1, 26, **Transpower** may apply to the **Commission** to extend the time limit set out in those clauses if
  - 27.1.1 **Transpower** considers that an extension is reasonably justified having regard to the circumstances; and
  - 27.1.2 the application for extension is made to the Commission no later than 15 working days before the time limit set out in those clauses is due to expire.
- 27.2 For the purposes of clause 27.1:
  - 27.2.1 any extension given by the **Commission** shall be effected by giving or posting notice of the extension to **Transpower**;
  - 27.2.2 the notice effecting the extension must specify the period of the extension and the reasons for the extension; and
  - 27.2.3 the notice will be published by the **Commission**.

### 28. Annual reporting for performance events

- 28.1 Transpower must publicly disclose at the same time as its annual compliance statement a summary of all reports publicly disclosed under clause 26.1 for the disclosure year.
- 28.2 **Transpower** must **publicly disclose** at the same time as its **annual compliance statement** a summary of all reports **publicly disclosed** under clause 26.2 for the **disclosure year**.

- 28.3 **Transpower** must **publicly disclose** at the same time as its **annual compliance statement**, for **measure of grid performance** GP-M, which measures reliability through the number of **momentary interruptions**: the number of **momentary interruptions** for the **disclosure year**;
- 28.4 Where **Transpower** must **publicly disclose** at the same time as its **annual compliance statement**:
  - 28.4.1 the cause of each momentary interruption;
  - 28.4.2 the date and time of each **momentary interruption**;
  - 28.4.3 the **grid** exit point(s) and **grid** injection point(s) affected by each **momentary** interruption; and
  - 28.4.4 an explanation of any general trends in **momentary interruptions**.
- 28.5 Where **asset performance measure** AP1, as calculated in accordance with clause 19.3.3, is lower than the **collar** value specified in Table 4.2, **Transpower** must **publicly disclose** at the same time as its **annual compliance statement**:
  - 28.5.1 the events that caused **asset performance measure** AP1 to go below the **collar**;
  - 28.5.2 reasons for asset performance measure AP1 going below the collar;
  - 28.5.3 the impact on **customers** for the events described in clause 28.5.1;
  - 28.5.4 actions **Transpower** has taken to minimise the effect of the events described in clause 28.5.1; and
  - 28.5.5 lessons **Transpower** has learned as a result of going below the **collar**.
- 28.6 Where **asset performance measure** AP2, as calculated in accordance with clause 19.3.4, is lower than the **collar** value specified in Table 4.2, **Transpower** must **publicly disclose** at the same time as its **annual compliance statement**:
  - 28.6.1 the events that caused **asset performance measure** AP2 to go below the **collar**;
  - 28.6.2 reasons for **asset performance measure** AP2 going below the **collar**;
  - 28.6.3 the impact on **customers** for the events described in clause 28.6.1;
  - 28.6.4 actions **Transpower** has taken to minimise the effect of the events described in clause 28.6.1; and
  - 28.6.5 lessons **Transpower** has learned as a result of going below the **collar**.

- 28.7 Where **Transpower** has not complied with the **asset health measure** AH quality standard for an **asset health measure asset class**, as specified in clause 21.1, it must **publicly disclose** at the same time as its **annual compliance statement**:
  - 28.7.1 reasons for not meeting the quality standard, and supporting evidence for those reasons; and
  - 28.7.2 steps that have been put in place by **Transpower** to prevent future non-compliance with the quality standard.

### 29. Wash-up building blocks calculation

- 29.1 For the purposes of annually calculating the **ex-post economic gain or loss**, **Transpower** must use:
  - 29.1.1 the approach and formulae specified in Schedule E;
  - 29.1.2 the opening RAB value;
  - 29.1.3 the actual amounts by month of **commissioning** in the **disclosure year** for **value of commissioned asset** of approved **base capex** and **major capex**;
  - 29.1.4 the **WACC**;
  - 29.1.5 **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**;
  - 29.1.6 the **opex allowance**, excluding operating lease payments capitalised in accordance with the **Transpower IM**, being:
    - (a) for the **disclosure year** from 1 July 2020 to 30 June 2021, \$271.5 million;
    - (b) for the **disclosure year** from 1 July 2021 to 30 June 2022, \$276.0 million;
    - (c) for the **disclosure year** from 1 July 2022 to 30 June 2023, \$286.0 million;
    - (d) for the **disclosure year** from 1 July 2023 to 30 June 2024, \$295.6 million; and
    - (e) for the **disclosure year** from 1 July 2024 to 30 June 2025, \$295.9 million;
  - 29.1.7 the corporate tax rate;
  - 29.1.8 the regulatory tax allowance calculated:
    - 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:
  - 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);
- 29.1.9 the term credit spread differential allowance;
- 29.1.10 for actual revenues received by **Transpower**:
  - (a) the **actual transmission revenue** received in the **pricing year**, as converted to a **disclosure year** value in accordance with clause 9.2; and
  - (b) the sum of **other regulated income** received in the **disclosure year**;
- 29.1.11 the amount of the forecast EV adjustment included in the forecast MAR;
- 29.1.12 the actual **pass-through costs** and **recoverable costs** calculated in accordance with Schedule H; and
- 29.1.13 any voluntary reduction in **actual transmission revenue** made by **Transpower** for the **pricing year**.
- 29.2 For the purposes of any disparity adjustments for calculating the **ex-post economic gain or loss** in clause 29.1, and for any disparity adjustments for calculating the **opex incentive amount** in clause 33.1-33.2, the **forecast CPI** that applied when the **opex allowance** and **forecast opex** were determined is:
  - 29.2.1 for the **disclosure year** from 1 July 2020 to 30 June 2021, 1.90%;
  - 29.2.2 for the **disclosure year** from 1 July 2021 to 30 June 2022, 2.10%;
  - 29.2.3 for the **disclosure year** from 1 July 2022 to 30 June 2023, 2.00%;
  - 29.2.4 for the disclosure year from 1 July 2023 to 30 June 2024, 2.00%; and
  - 29.2.5 for the **disclosure year** from 1 July 2024 to 30 June 2025, 2.00%.

### 30. Transpower to propose update of forecast SMAR

- 30.1 **Transpower** must provide the following information when proposing an update of a **forecast MAR** and **forecast SMAR** for the purposes of clause 8.5:
  - 30.1.1 an update of a **forecast MAR** and **forecast SMAR** for each remaining complete **pricing year** in **RCP3**, calculated in a manner consistent with the approach for calculating the **forecast SMAR** for the full period of **RCP3**, including, where applicable, to take account of the incremental revenue effect of:
    - (a) forecast **major capex** approved by the **Commission** in the most recently completed **disclosure year**;
    - (b) base capex approved by the Commission in the most recently completed disclosure year relating to one or more of the listed projects in Schedule I; and
    - (c) an updated **forecast EV adjustment** calculated for the **forecast MAR** in accordance with clause 32;
  - 30.1.2 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**;
  - 30.1.3 where applicable, a proposed updated summary of the **forecast MAR** and the **forecast SMAR** as set out in Schedule A;
  - 30.1.4 a certificate accompanying the proposal in the form set out in Schedule L, signed by at least two **directors** of **Transpower**; and
  - 30.1.5 be accompanied by an **independent assurance report** procured and prepared in accordance with clause 34.
- for the purposes of clause 30.1.1, the calculation of the update of a **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 **low incentive rate base capex allowance** in accordance with Schedule C1, Column 7;
  - (e) the **standard incentive rate base capex allowance** in accordance with Schedule C2, Column 7;
  - (f) the **WACC**;

- (g) 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**;
- (h) 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**;
- (i) the **forecast EV adjustment** amounts specified in clauses 32.1.1 to 32.1.5, adjusted, where applicable, in accordance with clauses 32.2 and 32.3;
- (j) 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];
- (k) 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
- (I) the **opex allowance** set out in clause 29.1.6.
- 30.3 The calculation of an update of the **forecast SMAR**, must, where applicable, use:
  - 30.3.1 the update of the **forecast MAR** calculated in accordance with clause 30.2;
  - 30.3.2 the conversion of the updated forecast MAR for each remaining complete pricing year in RCP3 to forecast SMAR calculated in accordance with clause 8.3, where the updated present value of the forecast SMAR for the remaining complete pricing years in RCP3 must equal the present value of the updated forecast MAR for the remaining complete pricing years in RCP3, determined using the WACC, and the forecast SMAR follows a trend equivalent to the IPP revenue growth rate; and
  - 30.3.3 the **IPP revenue growth rate** for each **pricing year** of **RCP3** as specified in clause 8.4.
- 30.4 For the purposes of determining the revenue impact of **major capex** approved by the **Commission** or of **base capex** approved by the **Commission** relating to **listed projects**, **Transpower** must:
  - 30.4.1 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;
  - 30.4.2 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
  - 30.4.3 for each **project** identified in accordance with subclauses 30.4.1 and 30.4.2, 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.

### 31. EV account summary

- For the purposes of providing the information specified in clause 24.1.6 for the **disclosure year**, the updated summary of the **EV account** must show:
  - 31.1.1 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 toWACC on the opening balance of the EV account;
    - (c) **Transpower's** allocation of **EV account entries** to the respective **HVAC** and **HVDC customers**; and
    - (d) post-tax amounts included in calculating the forecast EV
       adjustments in respect of the closing EV account balance for the
       final disclosure year of RCP2;
  - 31.1.2 the forecast EV account balance at the end of RCP3, taking into account forecast EV adjustments and interest at the post-tax estimate corresponding to WACC on the forecast opening EV account balance for each disclosure year;
  - 31.1.3 the source of calculation of the **EV account entries** referred to in subclause 31.1.1(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**;
    - 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**.
- 31.2 For the purposes of calculating **EV account entries, Transpower** must use:
  - 31.2.1 the major capex incentive rate;
  - 31.2.2 the base capex standard incentive rate;
  - 31.2.3 the base capex low incentive rate;
  - 31.2.4 the **low incentive rate base capex allowance** in accordance with Schedule C3, Column 7;
  - 31.2.5 the **standard incentive rate base capex allowance** in accordance with Schedule C4, Column 7;
  - 31.2.6 the **forecast CPI** used to determine the **low incentive rate base capex allowance** and the **standard incentive rate base capex allowance** in Schedule C3, Column 7 and Schedule C4, Column 7:
    - (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, 2.00%;
    - (d) for the disclosure year from 1 July 2023 to 30 June 2024, 2.00%; and
    - (e) for the **disclosure year** from 1 July 2024 to 30 June 2025, 2.00%;
  - 31.2.7 the forecast FX rate used to determine the low incentive rate base capex allowance and the standard incentive rate base capex allowance in Schedule C3, Column 7 and Schedule C4, Column 7, 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;
  - 31.2.8 the forecast FX rate used to determine the low incentive rate base capex allowance and the standard incentive rate base capex allowance in Schedule C3, Column 7 and Schedule C4, Column 7 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
- 31.2.9 the amount of the **standard incentive rate base capex allowance** to which the **forecast FX rate** applies for the purposes of determining the **standard incentive rate base capex allowance** in Schedule C4, Column 7 is as set out in Table 5.1:

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

			and approx		
Currency	2020/21	2021/22	2022/23	2023/24	2024/25
USD/NZD	16.1	14.7	9.0	7.0	6.1
EUR/NZD	3.9	3.4	3.9	3.4	3.0
GBP/NZD	-	-	-	-	-
AUD/NZD	0.7	0.2	0.2	0.3	0.1
JPY/NZD	0.0	0.0	0.1	0.0	0.0
SEK/NZD	0.7	0.7	0.8	0.9	1.2
CAD/NZD	-	-	-	-	-

### 32. <u>Forecast EV adjustment</u>

- 32.1 For the purposes of calculating an update of the **forecast MAR** for a **pricing year**, and subject to clause 32.2, the **forecast EV adjustment** amounts applied in calculating the initial **forecast MAR**, in respect of the closing **EV account** balance for the final **disclosure year** of **RCP2**, are:
  - 32.1.1 for the **disclosure year** from 1 July 2020 to 30 June 2021, [-\$21.0 million];
  - 32.1.2 for the **disclosure year** from 1 July 2021 to 30 June 2022, [-\$21.0 million];
  - 32.1.3 for the disclosure year from 1 July 2022 to 30 June 2023, [-\$21.0 million];
  - 32.1.4 for the **disclosure year** from 1 July 2023 to 30 June 2024, [-\$21.0 million];
  - 32.1.5 for the **disclosure year** from 1 July 2024 to 30 June 2025, [-\$21.0 million]; and
  - 32.1.6 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 32.1.1 to 32.1.5 in order to express the **forecast EV adjustment** amounts on a pre-tax basis in the **forecast MAR** building block inputs.

- 32.2 For the purpose of calculating an update of the **forecast MAR** for a **pricing year** under a reconsideration of the price path under clause 3.7.5(3) of the **Transpower IM** to account for a **large buildup in EV account balance**, the **forecast EV adjustment** amounts in clause 32.1 are to be adjusted so that, taking into account interest, if interest was accrued at the **RCP3 WACC** rate:
  - 32.2.1 the amounts of each **forecast EV adjustment** for the remaining complete **pricing years** of **RCP3** are equal; and
  - 32.2.2 if the same annual **forecast EV adjustment** amount as in clause 32.2.1 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.
- For the purposes of clause 32.2, where **forecast EV adjustments** are updated, a tax gross-up amount is calculated, consistent with clause 32.1.6.
- 33. Forecast opex for the Incremental rolling incentive scheme (IRIS)
  - 33.1 For the calculation of the **opex incentive amount**, the amount of **forecast opex** specified by the **Commission** for **IRIS** calculations is specified in clause 33.2, as adjusted for any disparity between the **forecast CPI** that applied when the **forecast opex** was initially determined and the **CPI**.
  - For the purposes of the calculation of the **opex incentive amount**, the amount of **forecast opex**, including operating lease payments otherwise capitalised in accordance with the **Transpower IM**, specified by the **Commission** is, for a **disclosure year**, as follows:
    - 33.2.1 for the disclosure year from 1 July 2020 to 30 June 2021, \$281.2 million;
    - 33.2.2 for the **disclosure year** from 1 July 2021 to 30 June 2022, \$285.9 million;
    - 33.2.3 for the disclosure year from 1 July 2022 to 30 June 2023, \$296.0 million;
    - 33.2.4 for the disclosure year from 1 July 2023 to 30 June 2024, \$305.6 million; and
    - 33.2.5 for the disclosure year from 1 July 2024 to 30 June 2025, \$306.2 million.
  - For the purposes of clause 33.1 and any disparity adjustments in calculating the **opex incentive amount**, the **forecast CPI** that applied when the **forecast opex** was determined is the same as that set out in clause 29.2.

### 34. <u>Independent assurance report</u>

- 34.1 Transpower must procure an independent assurance report by an assurance auditor in respect of the annual compliance statement or a proposal to update a forecast MAR and forecast SMAR that:
  - 34.1.1 is prepared in accordance with Standard on Assurance Engagements 3100 Compliance Engagements (SAE3100 (Revised)) and International Standard on Assurance Engagements 3000 (ISAE(NZ)3000 (Revised)) or their successor standards, signed by the assurance auditor, either in his or her own name or that of his or her firm; and
  - 34.1.2 is addressed to the **directors** of **Transpower** and to the **Commission** as the intended users of the assurance report.
- 34.2 The **independent assurance report** must state:
  - 34.2.1 that it has been prepared in accordance with Standard on Assurance Engagements 3100 Assurance Engagements on Compliance (SAE 3100 (Revised)) and International Standard on Assurance Engagements (New Zealand) 3000 (ISAE (NZ) 3000 (Revised)) or their successor standards;
  - 34.2.2 the work done by the assurance auditor;
  - 34.2.3 the scope and limitations of the assurance engagement;
  - 34.2.4 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;
  - 34.2.5 whether the **assurance auditor** has obtained sufficient recorded information and explanations that it required and, if not, the information and explanations not obtained;
  - 34.2.6 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 or the proposal to update a forecast MAR and forecast SMAR have been kept by Transpower and, if not, the records not so kept;
  - 34.2.7 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 or the proposal to update a forecast MAR and forecast SMAR has, where applicable, been properly extracted from Transpower's accounting and other records, sourced from its financial and non-financial systems; and
  - 34.2.8 whether in the assurance auditor's opinion, Transpower has complied, in all material respects, with this determination in preparing the annual compliance statement or the proposal to update a forecast MAR and forecast SMAR and, if not, the respects in which it has not done so.

### 35. <u>Exemptions</u>

- 35.1 The **Commission** may at any time, by way of written notice to **Transpower**:
  - 35.1.1 exempt **Transpower** from any of the information disclosure requirements contained in clauses 23.2.1(b), 25, 26, and 28.1 to 28.3 of this determination, for a period and on such terms and conditions as the **Commission** specifies in the notice; and
  - 35.1.2 amend or revoke any such exemption.

Schedule A: Summary of forecast MAR and forecast SMAR

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 for pricing year	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	[\$834.6 million]	N/A	N/A	N/A	N/A	[\$834.6 million]	[\$831.6 million ]
31 March 2022 (Year 2)	30 June 2022	[\$836.6 million]	\$X.X million	N/A	N/A	N/A	[\$836.6 million]	[\$839.8 million]
31 March 2023 (Year 3)	30 June 2023	[\$840.3 million]	\$XX million	\$X.X million	N/A	N/A	[\$840.3 million]	[\$848.2 million]
31 March 2024 (Year 4)	30 June 2024	[\$861.9 million]	\$X.X million	\$X.X million	\$X.X million	N/A	[\$861.9 million]	[\$856.8 million]
31 March 2025 (Year 5)	30 June 2025	[\$868.8 million]	\$X.X million	\$X.X million	\$X.X million	\$X.X million	[\$868.8 million]	[\$865.4 million]

### Schedule B: EV account summary

Item	Formula	Description
[Column 1]	[Column 2]	[Column 3]
Opening EV account balance	Α	Closing balance in the <b>EV account</b> for the previous
		disclosure year
Post-tax WACC	В	The post-tax estimate corresponding to WACC
Interest on opening EV account balance	C = A x B	Opening <b>EV account</b> balance multiplied by the post-tax
		estimate corresponding to WACC
EV account entries	D	The EV account entries calculated in accordance with clause
		31.2
Post-tax amount included in calculating the	E	Amount for the <b>disclosure year</b> in <b>RCP3</b> in respect of the
forecast EV adjustment for the disclosure		forecast closing post-tax <b>EV account</b> balance for the final
year in respect of the closing EV account		disclosure year of RCP2, as set out in clause 32.1
balance for the final disclosure year of RCP2		
Closing EV account balance	F = A + C + D - E	Opening EV account balance plus interest on opening EV
		account balance, plus EV account entries, minus forecast EV
		adjustment

Schedule C1: Approved low incentive rate base capex summary – commissioned basis (including capitalised operating leases)

Disclosure year ending	Value of low incentive rate base capex allowances as determined 29 August 2019	Incremental approved low incentive rate listed project base capex determined in November 2020	Incremental approved low incentive rate listed project base capex determined in November 2021	Incremental approved low incentive rate listed project base capex determined in November 2022	Incremental approved low incentive rate listed project base capex determined in November 2023	Approved low incentive rate base capex allowances 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	\$0 million	N/A	N/A	N/A	N/A	\$0 million
30 June 2022	\$0 million	\$XX.X million	N/A	N/A	N/A	\$0 million
30 June 2023	\$0 million	\$XX.X million	\$XX.X million	N/A	N/A	\$0 million
30 June 2024	\$0 million	\$XX.X million	\$XX.X million	\$XX.X million	N/A	\$0 million
30 June 2025	\$0 million	\$XX.X million	\$XX.X million	\$XX.X million	\$XX.X million	\$0 million

Schedule C2: Approved standard incentive rate base capex summary – commissioned basis (including capitalised operating leases)

Disclosure year ending	Value of standard incentive rate base capex allowance as determined 29 August 2019	Incremental approved standard incentive rate listed project base capex determined in November 2020	Incremental approved standard incentive rate listed project base capex determined in November 2021	Incremental approved standard incentive rate listed project base capex determined in November 2022	Incremental approved standard incentive rate listed project base capex determined in November 2023	Approved standard incentive rate base capex allowance 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	\$222.9 million	N/A	N/A	N/A	N/A	\$222.9 million
30 June 2022	\$277.3 million	\$XX.X million	N/A	N/A	N/A	\$277.3 million
30 June 2023	\$273.9 million	\$XX.X million	\$XX.X million	N/A	N/A	\$273.9 million
30 June 2024	\$280.0 million	\$XX.X million	\$XX.X million	\$XX.X million	N/A	\$280.0 million
30 June 2025	\$300.2 million	\$XX.X million	\$XX.X million	\$XX.X million	\$XX.X million	\$300.2 million

Schedule C3: Approved low incentive rate base capex summary – expenditure basis (excluding capitalised operating leases)

Disclosure year ending	Value of low incentive rate base capex allowances as determined 29 August 2019	Incremental approved low incentive rate listed project base capex determined in November 2020	Incremental approved low incentive rate listed project base capex determined in November 2021	Incremental approved low incentive rate listed project base capex determined in November 2022	Incremental approved low incentive rate 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	\$0 million	N/A	N/A	N/A	N/A	\$0 million
30 June 2022	\$0 million	\$XX.X million	N/A	N/A	N/A	\$0 million
30 June 2023	\$0 million	\$XX.X million	\$XX.X million	N/A	N/A	\$0 million
30 June 2024	\$0 million	\$XX.X million	\$XX.X million	\$XX.X million	N/A	\$0 million
30 June 2025	\$0 million	\$XX.X million	\$XX.X million	\$XX.X million	\$XX.X million	\$0 million

Schedule C4: Approved standard incentive rate base capex summary - expenditure basis (excluding capitalised operating leases)

Disclosure year ending	Value of standard incentive rate base capex allowance as determined 29 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	\$206.7 million	N/A	N/A	N/A	N/A	\$206.7 million
30 June 2022	\$266.8 million	\$XX.X million	N/A	N/A	N/A	\$266.8 million
30 June 2023	\$303.3 million	\$XX.X million	\$XX.X million	N/A	N/A	\$303.3 million
30 June 2024	\$274.8 million	\$XX.X million	\$XX.X million	\$XX.X million	N/A	\$274.8 million
30 June 2025	\$347.2 million	\$XX.X million	\$XX.X million	\$XX.X million	\$XX.X million	\$347.2 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	WACC	A1	WACC = A1	
WACC return on forecast opening RAB value	Forecast sum of opening RAB value for the disclosure year	В	A1 / (1 + A1) <sup>163/365</sup>	B x A1 / (1 + A1) <sup>163/365</sup>
WACC return on forecast VCA <sub>JUL</sub>		C1	$((1 + A1)^{349.5/365} - 1) / (1 + A1)^{163/365}$	C1 x ((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 x ((1 + A1) <sup>318.5/365</sup> - 1) / (1 + A1) <sup>163/365</sup>
WACC return on forecast VCA <sub>SEP</sub>	Forecast sum of value of	C3	$((1 + A1)^{288/365} - 1) / (1 + A1)^{163/365}$	C3 x ((1 + A1) <sup>288/365</sup> - 1) / (1 + A1) <sup>163/365</sup>
WACC return on forecast VCA <sub>OCT</sub>	commissioned asset for the month in the	C4	$((1 + A1)^{257.5/365} - 1) / (1 + A1)^{163/365}$	C4 x ((1 + A1) <sup>257.5/365</sup> - 1) / (1 + A1) <sup>163/365</sup>
WACC return on forecast VCA <sub>NOV</sub>	disclosure year	C5	$((1 + A1)^{227/365} - 1) / (1 + A1)^{163/365}$	C5 x ((1 + A1) <sup>227/365</sup> - 1) / (1 + A1) <sup>163/365</sup>
WACC return on forecast VCA <sub>DEC</sub>		C6	((1 + A1) <sup>196.5/365</sup> - 1) / (1 + A1) <sup>163/365</sup>	C6 x ((1 + A1) <sup>196.5/365</sup> - 1) / (1 + A1) <sup>163/365</sup>
WACC return on forecast VCA <sub>JAN</sub>		C7	$((1 + A1)^{165.5/365} - 1) / (1 + A1)^{163/365}$	C7 x ((1 + A1) <sup>165.5/365</sup> - 1) / (1 + A1) <sup>163/365</sup>

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 <sub>FEB</sub>		C8	$((1 + A1)^{136/365} - 1) / (1 + A1)^{163/365}$	C8 x ((1 + A1) <sup>136/365</sup> - 1) / (1 + A1) <sup>163/365</sup>
WACC return on forecast VCA <sub>MAR</sub>	Forecast sum of value of	С9	((1 + A1) <sup>106.5/365</sup> - 1) / (1 + A1) <sup>163/365</sup>	C9 x ((1 + A1) <sup>106.5/365</sup> - 1) / (1 + A1) <sup>163/365</sup>
WACC return on forecast VCA <sub>APL</sub>	commissioned asset for the month in the	C10	$((1 + A1)^{76/365} - 1) / (1 + A1)^{163/365}$	C10 x ((1 + A1) <sup>76/365</sup> - 1) / (1 + A1) <sup>163/365</sup>
WACC return on forecast VCA <sub>MAY</sub>	disclosure year	C11	$((1 + A1)^{45.5/365} - 1) / (1 + A1)^{163/365}$	C11 x ((1 + A1) <sup>45.5/365</sup> - 1) / (1 + A1) <sup>163/365</sup>
WACC return on forecast VCA <sub>JUN</sub>		C12	$((1 + A1)^{15/365} - 1) / (1 + A1)^{163/365}$	C12 x ((1 + A1) <sup>15/365</sup> - 1) / (1 + A1) <sup>163/365</sup>
Total forecast capital charge	Sum of <b>forecast MAR</b> building block values for formulas B through C12			Sum D = Sum of <b>forecast MAR</b> building block values B to 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 depreciation	E	1 / (1 + A1) <sup>163/365</sup>	E / (1 + A1) <sup>163/365</sup>
Operating expenditure	<b>Opex allowance</b> as specified in clause 29.1.6.	F	(1 + A1) <sup>19/365</sup>	F x (1 + A1) <sup>19/365</sup>
Forecast tax	Forecast <b>regulatory tax allowance</b> , calculated in accordance with clause 30.1.2(h)	G	(1 + A1) <sup>19/365</sup>	G x (1 + A1) <sup>19/365</sup>
Forecast TCSD	Forecast term credit spread differential allowance, calculated in accordance with Part 3, Subpart 5 of the Transpower IM	Н	(1 + A1) <sup>19/365</sup>	H x (1 + A1) <sup>19/365</sup>
Forecast EV adjustment	Forecast EV adjustment, as specified in clauses 32.1.1 to 32.3, including a tax gross up calculated at the corporate tax rate	I	1 / (1 + A1) <sup>163/365</sup>	I / (1 + A1) <sup>163/365</sup>

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 pass-through costs in accordance with Part 3, Subpart 1 of the Transpower IM, as specified in clauses 30.1.2(j)	J	(1 + A1) <sup>19/365</sup>	L x (1 + A1) <sup>19/365</sup>
Forecast recoverable costs	Forecast recoverable costs in accordance with Part 3, Subpart 1 of the Transpower IM, as specified in clauses 30.1.2(k)	К	(1 + A1) <sup>19/365</sup>	M x (1 + A1) <sup>19/365</sup>
TOTAL FORECAST MAR INCLUSIVE OF FORECAST PASS- THROUGH COSTS AND FORECAST RECOVERABLE COSTS	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	WACC	A1	WACC = A1	
WACC return on opening RAB value	Sum of <b>opening RAB value</b> for the <b>disclosure year</b>	В	A1	B x A1
WACC return on VCA <sub>JUL</sub>		C1	(1 + A1) <sup>349.5/365</sup> - 1	C1 x ((1 + A1) <sup>349.5/365</sup> - 1)
WACC return on VCA <sub>AUG</sub>		C2	(1 + A1) <sup>318.5/365</sup> - 1	C2 x ((1 + A1) <sup>318.5/365</sup> - 1)
WACC return on VCA <sub>SEP</sub>		C3	(1 + A1) <sup>288/365</sup> - 1	C3 x ((1 + A1) <sup>288/365</sup> - 1)
WACC return on VCA <sub>OCT</sub>	Sum of value of commissioned	C4	(1 + A1) <sup>257.5/365</sup> - 1	C4 x ((1 + A1) <sup>257.5/365</sup> - 1)
WACC return on VCA <sub>NOV</sub>	asset for the month in the disclosure year	C5	(1 + A1) <sup>227/365</sup> - 1	C5 x ((1 + A1) <sup>227/365</sup> - 1)
WACC return on VCA <sub>DEC</sub>		C6	(1 + A1) <sup>196.5/365</sup> - 1	C6 x ((1 + A1) <sup>196.5/365</sup> - 1)
WACC return on VCA <sub>JAN</sub>		C7	(1 + A1) <sup>165.5/365</sup> - 1	C7 x ((1 + A1) <sup>165.5/365</sup> - 1)
WACC return on VCA <sub>FEB</sub>		C8	(1 + A1) <sup>136/365</sup> - 1	C8 x ((1 + A1) <sup>136/365</sup> - 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>		C9	(1 + A1) <sup>106.5/365</sup> - 1	C9 x ((1 + A1) <sup>106.5/365</sup> - 1)
WACC return on VCA <sub>APL</sub>	Sum of value of commissioned	C10	(1 + A1) <sup>76/365</sup> - 1	C10 x ((1 + A1) <sup>76/365</sup> - 1)
WACC return on VCA <sub>MAY</sub>	asset for the month in the disclosure year	C11	(1 + A1) <sup>45.5/365</sup> - 1	C11 x ((1 + A1) <sup>45.5/365</sup> - 1)
WACC return on VCA <sub>JUN</sub>		C12	(1 + A1) <sup>15/365</sup> - 1	C12 x ((1 + A1) <sup>15/365</sup> - 1)
WACC return on lost assets	Sum of the <b>opening RAB value</b> of <b>lost assets</b> in the <b>disclosure year</b>	D	1 - (1 + A1) <sup>182/365</sup>	D x (1 - (1 + A1) <sup>182/365</sup> )
WACC return on found assets	Sum of the value of found asset of found assets in the disclosure year	E	(1 + A1) <sup>182/365</sup> - 1	E x ((1 + A1) <sup>182/365</sup> - 1)
WACC return on disposed assets	Sum of opening RAB value of disposed assets in the disclosure year	F	1 - (1 + A1) <sup>182/365</sup>	F x (1 - (1 + A1) <sup>182/365</sup> )
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 actual transmission revenue converted to a disclosure year value in accordance with clause 29.1.12(a)	Н	(1 + A1) <sup>163/365</sup>	H x (1 + A1) <sup>163/365</sup>
Transpower adjustment to recognise voluntarily foregone revenues	Amount of electricity transmission revenue permanently foregone by Transpower	J	(1 + A1) <sup>163/365</sup>	J x (1 + A1) <sup>163/365</sup>
Other regulated income	Sum of other regulated income	К	$(1 + A1)^{182/365}$	K x (1 + A1) <sup>182/365</sup>
Gain/(loss) on disposal of assets	Sum of disposal proceeds less opening RAB value for disposed assets	L	(1 + A1) <sup>182/365</sup>	L x (1 + A1) <sup>182/365</sup>
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	Opex allowance as specified in clause 29.1.6, and as adjusted for any disparity between the forecast CPI specified in clause 29.2 and actual CPI	N	(1 + A1) <sup>182/365</sup>	N x (1 + A1) <sup>182/365</sup>
Depreciation	Depreciation (excluding depreciation on disposed assets)	0		0
TCSD	The term credit spread differential allowance, calculated in accordance with Part 3, Subpart 5 of the Transpower IM	Р	(1 + A1) <sup>182/365</sup>	P x (1 + A1) <sup>182/365</sup>
Pass-through costs and recoverable costs	Pass-through costs and recoverable costs as set out in Schedule H, Formulae F and M.	Q	(1 + A1) <sup>182/365</sup>	Q x (1 + A1) <sup>182/365</sup>
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 regulatory tax allowance calculated in accordance with clause 29.1.10	S	(1 + A1) <sup>182/365</sup>	S x (1 + A1) <sup>182/365</sup>
Net operating profit/(loss) after tax	Sum of wash-up values for formulas R and S			Sum T = Sum R, less wash-up value S

AFTER-TAX EX-POST ECONOMIC GAIN OR LOSS	Difference between the capital charge (Sum G) and the net operating profit/(loss) after tax (Sum T)		Difference U = Sum G less Sum T
Forecast EV adjustment included in forecast MAR	Adjustment to recognise the forecast EV adjustment for the disclosure year, before tax gross up, as applied in setting the forecast MAR for the relevant pricing year	V	V
EV ACCOUNT ENTRY	This is the ex-post economic gain or loss adjusted for the forecast EV adjustment applied in setting the forecast MAR for the relevant pricing year, and is an EV account entry		Difference W = Difference U plus value V

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	СТСТ
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	KM0033_S1	POCO
N-1 security material economic consequence	GP1B and GP2B	KOE110_S1	TOPE
N security generator	GP1F and GP2F	KPA110_I1	ТВОР
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	ТВОР
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	СТСТ
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	СТСТ
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	СТСТ
N-1 security generator	GP1E and GP2E	ROX220_I1	СТСТ
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	СТСТ
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	СТСТ
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	СТСТ

RCP3 Sub-Category	Measure reference	Point of service	Customer
N-1 security generator	GP1E and GP2E	WHI220_I1	СТСТ
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	СНВР
N-1 security material economic consequence	GP1B and GP2B	WPW033_S1	СНВР
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	СТСТ
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 assets 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 322 Kikiwa 220 kV Line Circuit Breaker 342	
NIN_CD_342	MINIWA ZZU NV LIHE CIICUIL DIEANEI 34Z	

Asset name	Outage Block Description (circuit)	
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 kvVCircuit 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	Taumaranui–Te Kowhai 220 kV Circuit 1	
WKM_WRK_1	Whakamaru–Wairakei 220 kV Circuit 1	

Schedule H: Summary of actual pass-through costs and recoverable costs

Item	Formula	Description
[Column 1]	[Column 2]	[Column 3]
Local authority rates	Α	Rates payable to a local authority on
		system fixed assets
Commerce Act levies	В	Levies payable in accordance with clause
		3.1.2(2)(b)(i) of the Transpower IM
Electricity Authority	С	Levies payable in accordance with clause
levies		3.1.2(2)(b)(ii) of the Transpower IM
Utilities Disputes Limited	D	Levies payable in accordance with clause
levies		3.1.2(2)(b)(iii) of the Transpower IM
Other pass-through costs	Е	Any other levies that are pass-through
levies		costs in accordance with clause 3.1.2(1)(b)
		of the <b>Transpower IM</b>
Total pass-through costs	F = A + B+ C+D+E	Sum of pass-through costs for the
		disclosure year
Incremental rolling	G	Sum of recoverable costs under the
incentive scheme		incremental rolling incentive scheme in
recoverable costs		accordance with clause 3.1.3(1)(a) of the
		Transpower IM
Instantaneous reserves	Н	Instantaneous reserves availability charges
availability charge		in accordance with clause 3.1.3(1)(b) of the
		Transpower IM
Transmission alternative	1	Transmission alternative operating costs in
operating costs		accordance with clause 3.1.3(1)(c) of the
		Transpower IM
Operating costs incurred	J	The amount of any <b>operating costs</b> that are
as part of a major capex		recoverable costs in accordance with
project		clause 3.1.3(1)(d) of the Transpower IM
Net additional <b>operating</b>	K	The amount of recoverable costs in
costs incurred in		accordance with clause 3.1.3(1)(e) of the
responding to a		Transpower IM
catastrophic event		
Any levy payable to Fire	L	The amount of recoverable costs in
and Emergency New		accordance with clause 3.1.3(1)(f) of the
Zealand under the Fire		Transpower IM
and Emergency New		
Zealand Act 2017		
Total recoverable costs	M = G + H + I + J	Sum of <b>recoverable costs</b> for the <b>disclosure</b>
	+ K + L	year
Total pass-through costs	N = F + M	Sum of total pass-through costs and
and recoverable costs		recoverable costs for the disclosure year

### **Schedule I: Listed projects**

Line Name (Section)	Project Estimated Cost
	RCP3 (\$m)
Brunswick - Stratford B reconductoring	52.8
Bunnythorpe - Wilton A reconductoring	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

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) 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.

## Schedule L: Directors' certificate – proposal to update forecast MAR 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 proposed update of the forecast MAR and the forecast SMAR for the period [insert disclosure year(s)] 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 on 29 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 RCP3. 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 must provide an annual compliance statement (and supporting information) following each disclosure year ending 30 June. The Transpower IPP also requires Transpower to publicly disclose these and other information on its website. These additional 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 on our website at:

#### [insert hyperlink]

Copies of this determination are also available for inspection free of charge at the Commission (during ordinary office hours), and they are available for purchase at a reasonable price at the Commission.