

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

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

Part 1: General provisions

1. Title
 - 1.1 This determination is the Transpower Individual Price-Quality Path Determination 2020.
2. Commencement
 - 2.1 This determination takes effect on 1 April 2020.
3. Application
 - 3.1 This determination applies to **Transpower** in relation to the supply of **electricity lines services** for **RCP3**.
4. Interpretation
 - 4.1 Unless the context otherwise requires—
 - 4.1.1 terms appearing in bold type (except for headings) in this determination are defined terms;
 - 4.1.2 terms used in this determination that are defined in the **IMs**, but not in this determination, have the meaning given in the **IMs**;
 - 4.1.3 terms used in this determination that are defined in the **Act**, but not in this determination, or in the **IMs**, have the meaning given in the **Act**;
 - 4.1.4 any reference to a period of time is interpreted in accordance with section 35 of the Interpretation Act 1999;
 - 4.1.5 for the avoidance of doubt, references to terms from legislation in this determination have the meaning given in the applicable legislation at the time they are applied;
 - 4.1.6 financial items must be measured and disclosed in accordance with **GAAP 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. Individual price-quality path and information disclosures

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

5.1.1 the price path in Part 3; ~~and~~

5.1.2 the quality standards in clauses 14.1-14.4, 16.1-16.4, 17.1, 18.1 and 21.1;
and

~~5.1.25.1.3~~ the and-grid outputperformance measures in clause 11Part 4.

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

6. Applicable input methodologies

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

6.1.1 the **Transpower IM**; and

6.1.2 the **Capex IM**.

Part 2: Defined terms

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

A

Act means the Commerce Act 1986;

actual opex has the meaning given in the Transpower IM;

actual transmission revenue Means, in relation to a disclosure year, the
revenuesum of amounts received by **Transpower**
in a the relevant pricing year for electricity
transmission services;

(a) HVAC revenue;

(b) HVDC revenue;

AHI means Transpower's asset health assessment for
the relative health of an asset in the range
between 1 and 10, where an index of 1 denotes
best condition and an index of 10 denotes worst

~~or above denotes an asset in poor or very poor condition;~~

annual compliance statement	means a written statement made by Transpower 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: <ul style="list-style-type: none"> (a) tower grillage foundation; (b) tower protective coating; (c) insulators; (d)<u>(a)</u> power transformers; (e)<u>(b)</u> outdoor circuit breakers;
asset performance measure	has the meaning given in the Capex IM <u>and, for the purposes of this determination:</u> <ul style="list-style-type: none"> <u>(a) the revenue-linked grid output measures specified in clause 11.3; and</u> <u>(a)(b) the non-revenue linked grid output measures specified described in clauses 25.1.2 to 25.1.4.</u>
assurance auditor	means a person who: <ul style="list-style-type: none"> (a) <u>is (a) is</u> qualified for appointment as auditor of a company under the Companies Act 1993; <u>(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; has no relationship with, or interest in, Transpower that is likely to involve a conflict of interest; and</u>

~~(b) — for the avoidance of doubt;~~

~~(c) — (e) —:~~

~~(i) — has no input into not assisted with the compilation of either Transpower's proposed updated forecast MAR and forecast SMAR calculations for a pricing year of RCP3 or an the annual compliance statement for a disclosure year of RCP3, or provided advice or opinions (other than in relation to independent assurance reports) on the methodologies or processes used in compiling either Transpower's proposed forecast MAR and forecast SMAR calculations or the annual compliance statement; and~~

~~(i) —~~

~~(ii) (d) — is not associated with or directed by any person who has provided any such assistance, advice or opinion input;~~

B

base capex	has the meaning given in the Capex IM ;
base capex allowance	has the meaning given in the Capex IM ;
base capex expenditure adjustment	has the meaning given in the Capex IM ;
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 ;
<u>base capex programme</u>	<u>has the meaning given in the Capex IM;</u>
<u>base capex project</u>	<u>has the meaning given in the Capex IM;</u>
base capex standard incentive rate	has the meaning given in the Capex IM ;

C

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

	<u>contamination or chemical contamination;</u>
consumer	<u>has the meaning given in the Transpower IM; means any generator, distribution business, end user, or other entity in New Zealand that is connected, or applies to be connected, to the grid;</u>
corporate tax rate	has the meaning given in the Transpower IM ;
CPI	has the meaning given in the Capex IM ;
customer	<u>has the meaning given in the Transpower IM; has the meaning given in section 52C of the Act;</u>
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 ; <u>and, in relation to a pricing year, is the year commencing 1 July immediately following the start of that pricing year;</u>
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: <ul style="list-style-type: none"> (a) restoration; or (b) seven days after that unplanned interruption commenced;
E	
Electricity Authority	has the meaning given in the Transpower IM ;
<u>electricity transmission services</u>	<u>has the meaning given in the Capex IM</u> ;
electricity lines services	has the meaning given in <u>section 54C of the Act</u> ;
<u>engineer</u>	<u>has the meaning given in the Transpower IM</u> ;
EV account	has the meaning given in the Transpower IM ;
EV account entry	means, for <u>any disclosure year of RCP3 or for the RCP2 disclosure year ending 30 June 2020</u> , a <u>memorandum n-entry into the either of the HVAC or HVDC EV accounts</u> to record <u>for that disclosure year</u> : <ul style="list-style-type: none"> (a) an <u>after-tax ex-post economic gain or loss</u>; (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; or (e) an <u>after-tax ex-post economic gain or loss</u> calculated in accordance with clauses <u>31227.1.3(a)</u>; or (f) <u>an after-tax gain or loss calculated in accordance with clauses 31227.1.3(b) and</u>

31227.1.3(c);

EV adjustment

means, in relation to a **disclosure year**, an input to the **forecast MAR**, calculated in accordance with clause 28.1 for the purpose of returning to or recovering from **customers** a portion of the **EV account** balance applying to those **customers**;

ex-post economic gain or loss means, for any **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, means, for each **relevant pricing year**, in **RCP3**, is:

(a) the amount set out in Column 8 in Schedule A_T; or

(a)(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 maximum building blocks allowable revenue for a **disclosure year** as determined by the **Commission** and recorded in Column 8 the 'forecast MAR' list of **forecast MAR** in Schedule A;

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

forecast SMAR has the meaning given in the **Transpower IM**, and, means for each **relevant pricing year** in **RCP3**, is:

(a) the amount set out in Column 9 in Schedule A_T; or

(a)(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 30.32]; as amended or as calculated from time to time in accordance with clause [25.22] and amended in accordance with clause 3.7.5 of the Transpower IM;

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;

H

HVAC	<u>means</u> high voltage alternating current;
HVAC revenue	means, in relation to a disclosure year, the HVAC transmission revenue for the relevant pricing year including pass-through costs and recoverable costs passed on to any customer;
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 <u>electricity transmission lines</u> 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 revenue	means, in relation to a disclosure year, the HVDC transmission revenue for the relevant pricing year including pass-through costs and recoverable costs passed on to any customer;
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 <u>electricity transmission lines</u> services to customers ;
I	
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 <u>between from-grid</u> 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 <u>as set out in clause 30.2.38.4</u> ;
L	
<u>large buildup in EV account balance</u>	<u>has the meaning given in clause 3.7.3A of the Transpower IM;</u>
listed project	has the meaning given in the Capex IM ;
lost asset	has the meaning given in the Transpower IM ;
<u>low incentive rate base capex allowance</u>	<u>has the meaning given in the Capex IM;</u>
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 Capex IM and, for the purposes of this determination, <u>and the measures for revenue-linked grid output measures, the measure is are are</u> specified in clauses <u>10.2 and 13.1.11</u> ;
momentary interruption	means an interruption that is not planned, which has a duration of less than one minute;

N

<u>natural disaster</u>	<p><u>means an event caused by forces beyond human control, including without limitation:</u></p> <ul style="list-style-type: none"> <u>(a) earthquakes;</u> <u>(b) landslips;</u> <u>(c) floods;</u> <u>(d) severe weather events, including storms, wind and rain;</u> <u>(e) tsunamis; and</u> <u>(f) volcanic and hydrothermal activity;</u>
new investment contract	has the meaning given in the Transpower IM ;
<u>normalisation event</u>	<u>has the meaning specified in clause 20.2;</u>
O	
opening RAB value	has the meaning given in the Transpower IM ;
operating cost	has the meaning given in the Transpower IM ;
operating expenditure	has the meaning given in the Transpower IM ;
opex allowance	<p>means, for each disclosure year, the amount of operating expenditure specified by the Commission for the purposes of:</p> <ul style="list-style-type: none"> (a) calculating the forecast MAR; <u>or</u> (b) — calculating the ex-post economic gain or loss; or (c)(b) calculating the opex incentive amount;
opex incentive amount	has the meaning given in the Transpower IM ;
other regulated income	<p>means income associated with the supply of <u>electricity transmission-lines services</u>, excluding actual transmission revenue and investment-related income;</p>

outage	<p>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:</p> <p><u>(a) _____ (a) of less than one minute in duration;</u></p> <p>(a)<u>(b)</u> at the request of, or caused by, a customer; and</p> <p>(b)<u>(c)</u> (b) due to correct operation of Transpower's assets, caused by events in <u>the a customer's</u> assets;</p>
P	
pass-through costs	has the meaning given in the Transpower IM ;
<u>point of service</u>	<u>has the meaning set out in Part 1, clause 1.1(1) of the code;</u>
point of service sub-category	<p>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;</p> <p>(a) in relation to <u>measure of grid performance</u> GP1:</p> <ul style="list-style-type: none"> (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 **HVDC-Pole 2** life-extension project planned by **Transpower** in **RCP3**;

publicly disclose (or public disclosure) means to make permanently available to the public on **Transpower’s** website and to notify the **Commission** that it has been made ~~permanently~~ available ~~on **Transpower’s** website~~;

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;
RCP3-proposal	means Transpower's proposal of 23 November 2018 setting out its forecast expenditure and proposed grid output measures for RCP3;
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 ;
<u>related party</u>	<u>has the meaning given in the Transpower IM;</u>
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 ;
<u>third party</u>	<u>means not a related party and excludes, for the avoidance of doubt, an employee or party contracted by Transpower to provide electricity lines services;</u>
TPM	<u>has the meaning given in the Transpower IM; means the transmission pricing methodology specified in the code, as amended from time to time;</u>
<u>transmission lines services</u>	<u>means all electricity lines services supplied by Transpower excluding:</u> <ul style="list-style-type: none"> <u>(a) electricity lines services performed by Transpower as system operator; and</u> <u>(b) new investment contracts;</u>
Transpower	has the meaning given in the Act ;
Transpower IM	means the <i>Transpower Input Methodologies Determination</i> [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 <u>any</u> : <ul style="list-style-type: none"> (a) <u>any</u> unplanned interruptions originating on another party's system and where the Transpower grid operated
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correctly; ~~and~~

(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

~~a.c.~~ unplanned interruptions for which all load is supplied by a backfeed or by embedded generation;:-

V

value of commissioned asset

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

value of found asset

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

W

WACC

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

working day	has the meaning given in the Act ;
<u>work stoppage</u>	<u>means a temporary cessation of work as a form of protest, including without limitation a strike or lockout; and</u>
works under construction	has the meaning given in the Transpower IM .

Part 3: Price path

8. Maximum revenues

- 8.1 The maximum revenue that **Transpower** may recover for electricity transmission services for each pricing year in the RCP3 is the forecast SMAR for that pricing year.
- 8.2 The forecast ~~HVAC revenue~~ and forecast ~~HVDC~~ 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 relevant pricing year must not, in aggregate, 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.
- 8.4 The IPP revenue growth rate for each pricing year of RCP3 is [1.0%].
- 8.5 When the Commission reconsiders Transpower's individual price-quality path under Where Transpower applies to the Commission to reconsider Transpower's IPP for the purposes of clauses 3.7.4(1)(a)(v) or 3.7.4(4) of the Transpower IM, and determines in accordance with clause 3.7.5 of the Transpower IM that it should be amended, Transpower must:
- 8.5.1 provide to the Commission no later than 80 working days after the end of the prior complete at the same time as the annual compliance statement for the applicable 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-
- 8.2.18.5.2 publicly disclose that proposed updated forecast MAR and forecast SMAR and, where applicable, the forecast EV adjustment amounts in accordance with clause 32.2.

~~8.38.6~~ For the purposes of clause 8.543, ~~the proposed updated forecast MAR and the proposed updated forecast SMAR must provide forecast SMAR for each of the full remaining complete pricing years of RCP3~~ Transpower must apply based on the calculations required in clause 30 and using Schedule D, and must include any supporting information for its calculations.

9. Wash-up calculation Forecast SMAR

9.1 For each **disclosure year**, Transpower must calculate an **ex-post economic gain or loss** in accordance with clause 29.

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

10. Listed projects

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

~~10.11.~~ Revenue-linked performance measures

~~10.111.1~~ Subject to clause 20.18 f 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 ~~the~~:

~~10.1.111.1.1~~ measures of grid performance specified in clause 11.2; and

~~10.1.211.1.2~~ asset performance measures specified in clause 11.3;

~~10.211.2~~ For the purpose of clause 110.1.1, The **measures of grid performance** are:

~~10.2.111.2.1~~ GP1, which measures the total number of **unplanned interruptions** for each **point of service sub-category** during a **disclosure year**; and

~~10.2.211.2.2~~ GP2, which measures the average **duration** of **unplanned interruptions** for each **point of service sub-category** during a **disclosure year**.

~~10.3.11.3~~ **The asset performance measures are:**

~~10.3.11.3.1~~ **AP1**, which measures HVDC energy availability of ~~the HVDC Ppoles 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 ~~11.26~~17.1 to 17.3.

~~Performance is assessed each disclosure year against the quality standard specified in clause 17.217.217.217.217.217.217.216.1311.27 and the reporting required under clauses 2323232323232116, 2525252525252318 and 282828282828282620; and~~

~~10.3.211.3.2~~ **AP2**, which measures ~~average~~ percentage of time that the **HVAC circuits/assets** listed in Schedule G are available during a **disclosure year**, as set out in Table 4.2 and as described in clauses ~~11.30~~18.1 to 18.3.

~~Performance is assessed each disclosure year against the quality standard specified in clause 18.218.218.218.218.218.218.216.1711.31 and the reporting required under clause 2323232323232116, 2525252525252318 and 282828282828282620.~~

~~11.12.~~ **Quality standards for rRevenue-linked ~~quality standards and~~ grid output measures**

~~11.112.1~~ **The point of service sub-category limits for each point of service sub-category of the measures of grid performance GP1 and GP2 and the quality standard for asset performance measures AP1 and AP2 are identified for each revenue-linked grid output measure as shown in Table 4.1 and Table 4.2.**

~~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 sub-category measure in Table 4.1 in accordance with clauses 14.6 to 14.11.**

~~12.14.~~ **GP1 quality standard for remaining disclosure years of RCP3**

~~12.114.1~~ **To comply with the GP1 quality standard fFor the disclosure year from 1 July 2021 to 30 June 2022, Transpower must either:**

~~12.1.114.1.1~~ **comply with the measure of grid performance GP1 assessment specified in clause 14.5; or**

~~12.1.214.1.2~~ **have assessed values for ~~four~~ five or more of the GP1 point of service sub-categories for the disclosure year from 1 July 2020 to 30 June 2021 which did not exceed the point of service sub-category limit specified for each of those measure of grid performance GP1 point of service sub-categories in Table 4.1, as calculated in accordance with clauses 14.6 to 14.11.**

~~12.214.2~~ **To comply with the GP1 quality standard fFor the disclosure year from 1 July 2022 to 30 June 2023, Transpower must either:**

~~12.2.1~~14.2.1 comply with the **measure of grid performance** GP1 assessment specified in clause 14.5; or

~~12.2.2~~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 sub-categories** for the **disclosure year** from 1 July 2020 to 30 June 2021 which did not exceed the **point of service sub-category** limit specified for each of those **measure of grid performance GP1 point of service sub-categories** ~~measures~~ in Table 4.1, as calculated in accordance with clauses 14.6 to 14.11.

~~12.3~~14.3 **To comply with the GP1 quality standard** ~~f~~For the **disclosure year** from 1 July 2023 to 30 June 2024, **Transpower** must **either**:

~~12.3.1~~14.3.1 comply with the **measure of grid performance** GP1 assessment specified in clause 14.5; or

~~12.3.2~~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**.

~~12.4~~14.4 **To comply with the GP1 quality standard** ~~f~~For the **disclosure year** from 1 July 2024 to 30 June 2025, **Transpower** must **either**:

~~12.4.1~~14.4.1 comply with the **measure of grid performance** GP1 assessment specified in clause 14.5; or

~~12.4.2~~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**.

~~12.5~~14.5 For the purposes of clauses ~~14.13~~ 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.

~~12.6~~14.6 **Subject to clause 20, f**For the purposes of clause ~~12.2132.1211.2 and 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**.

~~12.7~~14.7 Subject to clause 20, fFor the purposes of clauses ~~12.2132.1211.2 and 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**.

~~12.8~~14.8 Subject to clause 20, fFor the purposes of clause ~~12.2132.1211.2 and 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**.

~~12.9~~14.9 Subject to clause 20, fFor the purposes of clause ~~12.2132.1211.2 and 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**.

~~12.10~~14.10 Subject to clause 20, fFor the purposes of clause ~~12.2132.1211.2 and 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**.

~~12.11~~14.11 Subject to clause 20, fFor 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 ~~Calculation of~~ 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 sub-category** in Table 4.1 in accordance with clauses 16.6 to 16.11.

~~13.16.~~ GP2 quality standard for remaining disclosure years of RCP3

~~13.1~~16.1 To comply with the GP2 quality standard for the **disclosure year** from 1 July 2021 to 30 June 2022, **Transpower** must either:

~~13.1.1~~16.1.1 comply with the **measure of grid performance** GP2 assessment specified in clause 16.5; or

~~13.1.2~~16.1.2 have assessed values for **four** or more of the **GP2 point of service sub-category** **measures** for the **disclosure year** from 1 July 2020 to 30 June 2021 which did not exceed the **point of service sub-category** limit specified for each of those **measure of grid performance GP2 point of service sub-category** **measures** in Table 4.1, as calculated in accordance with clauses 16.6 to 16.11.

~~13.2~~16.2 To comply with the GP2 quality standard for the **disclosure year** from 1 July 2022 to 30 June 2023, **Transpower** must either:

~~13.2.1~~16.2.1 comply with the **measure of grid performance** GP2 assessment specified in clause 16.5; or

~~13.2.2~~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 sub-category** **measures** for the **disclosure year** from 1 July 2020 to 30 June 2021 which did not exceed the **point of service sub-category** limit specified for each of those **measures of grid performance GP2 point of service sub-category** **measures** in Table 4.1, as calculated in accordance with clauses 16.6 to 16.11.

~~13.3~~16.3 To comply with the GP2 quality standard for the **disclosure year** from 1 July 2023 to 30 June 2024, **Transpower** must either:

~~13.3.1~~16.3.1 comply with the **measure of grid performance** GP2 assessment specified in clause 16.5; or

~~13.3.2~~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**.

~~13.4.1~~16.4 To comply with the GP2 quality standard For the **disclosure year** from 1 July 2024 to 30 June 2025, **Transpower** must either:

~~13.4.1~~16.4.1 comply with the measure of grid performance GP2 assessment specified in clause 16.5; or

~~13.4.2~~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.

~~13.5~~16.5 For the purposes of clause ~~0-16.15~~ 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 y-measures** for the **disclosure year** must not exceed the **point of service sub-category** limit specified for each of those **measure of grid performance** GP2 **point of service sub-categories** in Table 4.1.

~~13.6~~16.6 Subject to clause 20, fFor the purposes of clauses ~~1.115.1011.1415~~ and 16.5, **Transpower's** assessed value for **point of service sub-category measure**-GP2A for a **disclosure year** is calculated in accordance with the formula:

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

~~13.7~~16.7 Subject to clause 20, fFor the purposes of clauses ~~1.115.1011.1415~~ and 16.5, **Transpower's** assessed value for **point of service sub-category measure**-GP2B for a **disclosure year** is calculated in accordance with the formula:

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

~~13.8~~16.8 Subject to clause 20, fFor the purposes of clauses ~~1.115.1011.1415~~ and 16.5, **Transpower's** assessed value for **point of service sub-category measure**-GP2C for a **disclosure year** is calculated in accordance with the formula:

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

~~13.9~~16.9 Subject to clause 20, fFor the purposes of clauses ~~1.115.1011.1415~~ and 16.5, **Transpower's** assessed value for **point of service sub-category measure**-GP2D for a **disclosure year** is calculated in accordance with the formula:

GP2D assessed value = the sum of the **duration** of all **unplanned interruptions** for **point of service sub-category measure**-GP2D commencing within the

disclosure year divided by the total number of **unplanned interruptions** for the **point of service sub-category measure-GP2D** commencing within the **disclosure year**.

~~13.10~~16.10 Subject to clause 20, fFor the purposes of clauses ~~1.115.10~~11.1415 and 16.5, **Transpower's** assessed value for **point of service sub-category measure-GP2E** for a **disclosure year** is calculated in accordance with the formula:

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

~~13.11~~16.11 Subject to clause 20, fFor the purposes of clauses ~~1.115.10~~11.1415 and 16.5, **Transpower's** assessed value for **point of service sub-category measure-GP2F** for a **disclosure year** is calculated in accordance with the formula:

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

17. AP1 quality standard for each disclosure year of RCP3

~~13.12~~17.1 For each **disclosure year**, **Transpower** must comply with the **asset performance measure AP1** quality standard as specified in clause 17.2.

~~13.13~~17.2 For the purpose of clause ~~11.26~~17.1, to comply with the **asset performance measure AP1** quality standard, **Transpower's the HVDC** energy availability for **the HVDC Ppoles 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.

~~13.14~~17.3 For the purposes of clause 17.2, subject to clause 17.4 and clause 20, the **HVDC** energy availability for **the HVDC Ppoles 2** and **Pole 3** for the **disclosure year** is calculated as a percentage term in accordance with the formula:

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

where:

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

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

~~13.15~~17.4 For the purposes of clause ~~17.241-27~~ and subject to clause 20, for a maximum of ~~3~~**three** disclosure years of RCP3 during the life of Project k, the Project k adjustment may be added to the HVDC energy availability for ~~the HVDC Ppoles 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 (0.07 or p)

where:

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

18. AP2 quality standard for each disclosure year of RCP3

~~13.16~~18.1 For each disclosure year, Transpower must comply with the asset performance measure AP2 quality standard as specified in clause 18.2.

~~13.17~~18.2 For the purpose of clause ~~18.111-30~~, to comply with the asset performance measure AP2 quality standard, ~~the Transpower's average~~ percentage of the time that the HVAC ~~circuits-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.

~~13.18~~18.3 For the purposes of clause 18.2, subject to clause 20, the average percentage of the time that the HVAC ~~circuits-assets~~ are available during the disclosure year is calculated as a percentage term in accordance with the formula:

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

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

Point of service sub-category	Cap	Grid output target	Collar	Point of service sub-category limit	Grid output Incentive rate
GP1: number of interruptions (per annum)					\$ per interruption
GP1A: N-1 security high economic consequence	0	7	14	14	335,714,421,429
GP1B: N-1 security material economic consequence	7	24	41	41	40,294,500,000
GP1C: N security high economic consequence	4	6	8	8	250,325,000
GP1D: N security material economic consequence	9	23	37	37	41,786,53,571
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 interruption (min)					\$ per minute
GP2A: N-1 security high economic consequence	30	92	154	154	37,903,47,581
GP2B: N-1 security material economic consequence	36	61	86	86	27,400,34,000
GP2C: N security high economic consequence	0	103	206	206	4,854,6311
GP2D: N security material economic consequence	0	140	280	280	4,179,5,357
GP2E: N-1 security generator	50	174	298	298	2,016
GP2F: N security generator	11	93	175	175	3,049

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

Asset performance measure	Cap	Grid output target	Collar	Quality standard	Grid output Incentive rate
AP1: HVDC availability (%)					\$ per 1%
HVDC availability	99.75	98.75	97.75	96.75	50 350,000
AP2: HVAC availability (%)					\$ per 1%
HVAC availability (71 selected assets)	99.2	99.0	98.8	98.6	53 500,000

14.19. The grid output adjustment

14.19.1 ~~14.19.1~~ **Transpower** must calculate the **grid output adjustment** for each **disclosure year** for the **revenue-linked grid output measures**.

14.19.2 ~~14.219.2~~ 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.

14.19.3 ~~14.319.3~~ For the purposes of calculating the **grid output adjustment**, the output achieved is:

14.3.19.3.1 ~~14.3.19.3.1~~ for each of the **point of service sub-categoriesy measures**-GP1A, GP1B, GP1C, GP1D, GP1E and GP1F, the total number of all **unplanned interruptions commencing within** the **disclosure year**;

14.3.219.3.2 ~~14.3.219.3.2~~ for each of the **point of service sub-categoriesy measures**-GP2A, GP2B, GP2C, GP2D, GP2E and GP2F, the sum of the **durations** of all **unplanned interruptions** in the **disclosure year** divided by the total number of **unplanned interruptions commencing within** the **disclosure year**;

14.3.319.3.3 ~~14.3.319.3.3~~ for **asset performance measure AP1**, subject to clause 19.3.4 **and clause 20**, the **HVDC energy availability** for ~~the HVDC Ppoles 2~~ and **Pole 3** is calculated as a percentage term in the following manner:

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

where:

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

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

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

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

14.419.4 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 ~~the HVDC Ppoles 2 and 3-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 (0.07 or p)

where:

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

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

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

20. Normalisation

20.1 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;**
- (j) 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;**
- (l) 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.

20.4 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.

15. Performance measures not linked to revenue

15.1—The performance measures not linked to revenue are the:

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

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

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

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

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

~~asset health measure AH, which measures the percentage of assets with AHI of 8 or greater (assets in poor or very poor condition where an index of 1 denotes best condition and an index of 10 denotes worst condition) in each asset health measure asset class. Performance is assessed each disclosure year against the quality standards described in clauses 14.3 to 14.9 and the reporting required under clauses 16.2.4(k) and 20.8.~~

16.21. Quality standards where grid output measures not linked to revenue

16.1—For each disclosure year, Transpower must comply with the measure of grid performance GP-M quality standard, which measures reliability through the number of momentary interruptions, specified in clause 14.2.

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

16.321.1 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 (assets in poor or very poor condition where an index of 1 denotes best

~~condition and an index of 10 denotes worst condition)~~ for each **asset health measure asset class** described in clauses ~~14.4 to 19.714.9~~21.3 to 21.4 and Table 4.3.

~~16.4~~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.

~~16.5~~ For the purposes of clause ~~21.221.221.219.214.4~~, **Transpower's** assessed value for ~~the tower grillage foundation~~ **asset health measure asset class** for each **disclosure year** is calculated in accordance with the formula:

Tower grillage foundation assessed value =

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

~~16.6~~ For the purposes of clause ~~21.221.221.221.219.214.4~~, **Transpower's** assessed value for ~~the tower protective coating~~ **asset health measure asset class** for each **disclosure year** is calculated in accordance with the formula:

Tower protective coating assessed value =

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

~~16.7~~ For the purposes of clause ~~21.221.221.221.219.214.4~~, **Transpower's** assessed value for ~~the insulators~~ **asset health measure asset class** for each **disclosure year** is calculated in accordance with the formula:

Insulators assessed value =

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

~~16.8~~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 =

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

~~16.9~~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 =

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

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 (%)
Tower grillage foundation	7.11	8.17	8.22	7.89	9.47
Tower protective coating	5.77	6.81	8.09	8.94	9.96
Insulators	1.55	3.35	5.59	7.96	10.36
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

~~17.22.~~ Pricing compliance statement

~~17.1~~22.1 No later than five **working days** after **Transpower** announces, or amends, its forecast **HVAC revenue or forecast HVDC revenue** ~~revenue~~ for the purpose of setting or resetting charges under the **TPM** for a **pricing year**, **Transpower** must:

~~17.1.1~~22.1.1 provide to the **Commission** a written statement (the **pricing compliance statement**); and

~~17.1.2~~22.1.2 publicly disclose the **pricing compliance statement**.

~~17.2~~22.2 The **pricing compliance statement** must:

~~17.2.1~~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

~~(a)~~(b) the reasons for non-compliance in each case;

~~17.2.222.2.4~~ state the date on which the **pricing compliance statement** was prepared; and

~~17.2.322.2.5~~ include a certificate in the form set out in Schedule J signed by at least two **directors** of **Transpower**.

18.23. Annual compliance statement

~~18.123.1~~ Subject to clause 275, nNo later than ~~80-1015~~ working days ~~from~~after the end of each **disclosure year**, **Transpower** must:

~~18.1.123.1.1~~ provide to the **Commission** a written statement (the **annual compliance statement**); and

~~18.1.223.1.2~~ **publicly disclose** the **annual compliance statement** and accompanying **independent assurance report**.

~~18.223.2~~ The **annual compliance statement** must:

~~18.2.123.2.1~~ state whether or not **Transpower** has:

(a) ~~complied with the price path in Part 3 for the disclosure year;~~

~~(b)~~(a) complied with the quality standards in clauses 14.1-14.4, 16.1-16.4, 17.1, 18.1 and 21.1~~Part 4~~;

~~(c)~~(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**;

~~(d)~~(c) complied with requirements related to **grid output adjustment** calculations and **public disclosure**; and

~~(e)~~(d) complied with requirements related to wash-up calculations and **public disclosure**;

~~18.2.223.2.2~~ provide the information reasonably necessary to demonstrate compliance with the price path in Part 3 and quality standards in clauses 14.1-14.4, 16.1-16.4, 17.1, 18.1 and 21.1~~Part 4~~;

~~18.2.323.2.3~~ if **Transpower** has not complied with the price path in Part 3 or any quality standards in clauses 14.1-14.4, 16.1-16.4, 17.1, 18.1 and 21.1~~Part 4~~, disclose:

(a) each requirement and quality standard that is not complied with; and

- (b) the reasons for non-compliance in each case;

~~18.2.4~~23.2.4 include, information on performance against the following performance measures:

- (a) for **measure of grid performance GP1**: the assessed value and the **point of service sub-category** limit for each **point of service sub-category** for the **disclosure year**;
- (b) for **measure of grid performance GP1**: the **cap** and **grid output target** for each **point of service sub-category** for the **disclosure year**;
- (c) for **measure of grid performance GP2**: the assessed value and the **point of service sub-category** limit for each **point of service sub-category** for the **disclosure year**;
- (d) for **measure of grid performance GP2**: the **cap** and **grid output target** for each **point of service sub-category** for the **disclosure year**;
- ~~(e)~~ for **measure of grid performance GP-M**: the quality standard for the **disclosure year**;
- ~~(f)~~ for **measure of grid performance GP-M**, which measures reliability through the number of **momentary interruptions**: the number of **momentary interruptions** for the **disclosure year**;
- ~~(g)~~(e) for **asset performance measure AP1**: **Transpower's HVDC energy availability** for the **HVDC Ppoles 2** and **Pole 3** for the **disclosure year**, and the quality standard for the **disclosure year**;
- ~~(h)~~(f) for **asset performance measure AP1**: the **cap, collar** and **grid output target** for the **disclosure year**;
- ~~(+)~~(g) for **asset performance measure AP2**: the ~~average~~ percentage of the time that **Transpower's HVAC circuits-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**;
- ~~(k)~~(i) for **asset health measure AH**: the assessed value and ~~the~~ quality standard for each **asset health measure asset class** for the **disclosure year**;

~~18.2.5~~23.2.5 state the date on which the **annual compliance statement** was prepared;

~~18.2.6~~23.2.6 include a certificate in the form set out in Schedule K, signed by at least two **directors** of **Transpower**; and

~~18.2.723.2.7~~ be accompanied by an **independent assurance report** procured and prepared in accordance with clause ~~340~~.

19.24. Annual compliance statement – information required

~~19.1.24.1~~ The **annual compliance statement** for a **disclosure year** must include:

~~19.1.124.1.1~~ the **ex-post economic gain or loss** ~~(including for each of HVAC and HVDC)~~ for the **disclosure year**, calculated in accordance with clause ~~294.1~~ and Schedule E, including any supporting information;

~~19.1.224.1.2~~ the **forecast SMAR** ~~applicable to used for the relevant pricing year~~ forecast revenue for **electricity transmission services**, including **pass-through costs** and **recoverable costs** passed on to any **customer**, that **Transpower** uses for setting charges under the **TPM** for the **relevant pricing year**; ~~in accordance with clause [x];~~

~~19.1.324.1.3~~ the **HVAC transmission revenue** for the **relevant pricing year**;

~~19.1.424.1.4~~ the **HVDC transmission revenue** for the **relevant pricing year**;

~~19.1.524.1.5~~ 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**;

~~19.1.6~~ where applicable, the proposed update of any **forecast MAR** and **forecast SMAR** that is calculated for the purposes of clause 8.4, in accordance with clause 25 and Schedule D, including any supporting information;

~~19.1.7~~ a description and explanation of the calculation method and key assumptions applied by **Transpower** ~~used for when calculating that a~~ proposed update of a **forecast MAR** and **forecast SMAR**, including any variations from the calculation method and key assumptions used for the purposes of proposed updates of any **forecast SMAR** in any previous **disclosure year**;

~~19.1.8~~ a description and explanation of any voluntary revenue reductions that **Transpower** seeks to apply when setting charges under the **TPM** for any future **pricing year**;

~~19.1.9~~ where applicable, an updated summary of the **forecast MAR** and the **forecast SMAR** as set out in Schedule A;

~~19.1.1024.1.6~~ an updated summary of the **EV account** as set out in Schedule B ~~and the an updated forecast EV account balance at the end of RCP3, and, where these are~~ is supported by the further information required in clause ~~31297.1,~~ and where the **EV account entries** are calculated in accordance with clause ~~31297.2;~~

~~19.1.1124.1.7~~ a summary of **pass-through costs** and **recoverable costs** as set out in Schedule H, including:

- (a) ~~the pass-through costs and recoverable costs recovered by Transpower from customers as part of its revenue for the relevant pricing year;~~
- (b) ~~the pass-through costs and recoverable costs of Transpower during the disclosure year;~~
- (c)(a) a description and explanation of any **operating costs** incurred as part of a **major capex project**; and
- (d)(b) a summary of ~~the any~~ prudent net additional **operating costs** incurred in responding to a **catastrophic event**; and
- (e) ~~a description and explanation of any voluntary revenue reduction Transpower has made in calculating the recoverable costs recovered by Transpower from customers as part of its revenue for the relevant pricing year; and~~

~~19.1.12~~24.1.8 an explanation for the difference between the forecast opex and actual opex, including in each forecast and actual case 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;

~~19.1.13~~24.1.9 updated summaries of the approved base capex as set out in Schedules C1 to C4 and Schedule C2; and

24.1.10 details of any changes to Transpower's policy of hedging capital expenditure during the disclosure year; and.

~~19.1.14~~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.

20.25. Information to accompany the annual compliance statement

~~20.1.25.1~~ Transpower must publicly disclose the following additional information at the same time as its annual compliance statement for the following performance measures:

~~20.1.125.1.1~~ 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;

~~20.1.225.1.2~~ 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 circuits 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;

~~20.1.3~~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 ~~circuits~~assets set out in Schedule G – for ~~circuits-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;

~~20.1.4~~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;
- ~~(a)~~(b) how much notice **Transpower** provided to customers before it occurred;
- ~~(b)~~(c) how long customers were reduced to N-security of supply; and
- ~~(c)~~(d) the points of services the level of demand at the grid exit point(s) affected by the reduced N-security of supply; and;
- ~~(d)~~ any notification made outside of the Planned Outage Co-ordination Protocol~~process rules~~the steps **Transpower** took to inform affected customers;

~~20.1.5~~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.

21.26. Periodic reporting for performance events

~~21.1.26.1~~26.1 Subject to clause 275, fFor 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**:

- ~~21.1.1~~26.1.1 _____ the cause of the **unplanned interruption**;
- ~~21.1.2~~26.1.2 _____ the start date and time of the **unplanned interruption**;
- ~~21.1.3~~26.1.3 _____ the end date and time of the **unplanned interruption**;

~~21.1.4~~26.1.4 the megawatts affected by the **unplanned interruption**;

~~21.1.5~~26.1.5 the **grid** exit point(s) and **grid** injection point(s) affected by the **unplanned interruption**;

~~21.1.6~~26.1.6 actions **Transpower** took to minimise the effect of the **unplanned interruption**; and

~~21.1.7~~26.1.7 lessons **Transpower** has learned as a result of the **unplanned interruption**.

~~21.2~~26.2 Subject to clause 27.5, fFor each **interruption** during a **disclosure year** over one system minute, **Transpower** must **publicly disclose** within 42 **working days** of the **interruption**:

~~21.2.1~~26.2.1 the cause of the **interruption**;

~~21.2.2~~26.2.2 the start date and time of the **interruption**;

~~21.2.3~~26.2.3 the end date and time of the **interruption**;

~~21.2.4~~26.2.4 the megawatts affected by the **interruption**;

~~21.2.5~~26.2.5 the **grid** exit point(s) and **grid** injection point(s) affected by the **interruption**;

~~21.2.6~~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**.

22.28. Annual reporting for performance events

- 22.1 — ~~Transpower must publicly disclose a report by an engineer at the time of providing its annual compliance statement for a disclosure year where Transpower has not complied with any of the following quality standards:~~
- 22.2 — ~~measure of grid performance GP1, where the quality standard is specified in clauses 11.3 to 11.6;~~
- 22.3 — ~~measure of grid performance GP2, where the quality standard is specified in clauses 11.15 to 11.19;~~
- 22.4 — ~~asset performance measure AP1, where the quality standard is specified in clause 11.26; and~~
- 22.5 — ~~asset performance measure AP2, where the quality standard is specified in clause 11.30.~~
- 22.6 — ~~For the purposes of clause 20.1, the report must include:~~
- 22.7 — ~~the cause or causes of the non-compliance with the quality standards;~~
- 22.8 — ~~descriptions of the failure events and other contributory factors that led to the non-compliance with quality standards;~~
- 22.9 — ~~the outcome of any impact reviews undertaken by Transpower on each failure event relating to customers or consumers who are directly or indirectly consuming electricity lines services;~~
- 22.10 — ~~what actions were undertaken by Transpower to prevent or mitigate similar events or contributing factors in the future; and~~
- 22.11 — ~~state the engineer's opinion on whether the non-compliance with quality standards indicates there is need for Transpower to take further action in respect of Transpower's:~~
- 22.12 — ~~asset management practices;~~
- 22.13 — ~~knowledge of the condition of its assets; and~~
- 22.14 — ~~prioritisation of its projects;~~
- 22.1528.1 — ~~Transpower must publicly disclose at the same time as its annual compliance statement a summary of all reports publicly disclosed under clause 26~~19.1 for the disclosure year.
- 22.1628.2 — ~~Transpower must publicly disclose at the same time as its annual compliance statement a summary of all reports publicly disclosed under clause 26~~19.2 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**;

~~22.17.2~~28.4 Where **Transpower** has not complied with the **measure of grid performance GP-M** in accordance with clauses 14.1, it must **publicly disclose** at the same time as its **annual compliance statement**:

~~22.17.1~~28.4.1 the cause of each **momentary interruption**;

~~22.17.2~~28.4.2 the **start** date and time of each **momentary interruption**;

the **end date** and time of each **momentary interruption**;

~~22.17.3~~the megawatts affected by each **momentary interruption**; and

28.4.3 the **grid** exit point(s) and **grid** injection point(s) affected by each **momentary interruption**; and

~~22.17.4~~28.4.4 an explanation of any **general trends in momentary interruptions**.

~~22.18.2~~28.5 Where **Transpower's asset performance measure AP1** is lower than the **collar** specified in Table 4.2, as calculated in accordance with clauses ~~16.14~~11.28 and ~~11.29~~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**:

~~22.18.1~~28.5.1 the events that caused **Transpower asset performance measure AP1** to go below the **collar**;

~~22.18.2~~28.5.2 reasons for **asset performance measure AP1** **Transpower** going below the **collar**;

~~22.18.3~~28.5.3 the impact on **Transpower's customers** for the events **mentioned described** in clause ~~28.56~~19.3.3.1;

~~22.18.4~~28.5.4 actions **Transpower** has taken to minimise the effect of the events **mentioned described** in clause ~~28.56~~19.3.3.1; and

~~22.18.5~~28.5.5 lessons **Transpower** has learned as a result of going below the **collar**.

~~22.19.2~~28.6 Where **Transpower's asset performance measure AP2** is lower than the **collar** specified in Table 4.2, as calculated in accordance with clause ~~19.3.4~~11.32, is lower than the **collar** value specified in Table 4.2, **Transpower** must **publicly disclose** at the same time as its **annual compliance statement**:

~~22.19.1~~28.6.1 the events that caused **asset performance measure AP2** **Transpower** to go below the **collar**;

~~22.19.2~~28.6.2 reasons for **asset performance measure AP2** **Transpower** going below the **collar**;

~~22.19.3~~28.6.3 the impact on **Transpower's customers** for the events ~~mentioned~~ described in clause ~~28.67.1~~;

~~22.19.4~~28.6.4 actions **Transpower** has taken to minimise the effect of the events ~~mentioned~~ described in clause ~~28.67.1~~; and

~~22.19.5~~28.6.5 lessons **Transpower** has learned as a result of going below the collar.

~~22.20~~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 ~~21.114.3~~, it must **publicly disclose** at the same time as its **annual compliance statement**:

~~22.20.1~~28.7.1 reasons for not meeting the quality standard, and supporting evidence for those reasons; and

~~22.20.2~~28.7.2 ~~measures~~ steps that have been put in place by Transpower to prevent future non-compliance with the quality standard.

Asset health initiatives reporting

~~22.21~~—**Transpower** must **publicly disclose** a plan for developing asset and network risk modelling for **RCP3** by 1 October 2020.

~~22.22~~—For the ~~disclosure year~~ from 1 July 2021 to 30 June 2022, **Transpower** must **publicly disclose** a report from an independent expert on asset management in accordance with terms of reference which are to be proposed by **Transpower** at the same time as its **annual compliance statement** for ~~disclosure year~~ from 1 July 2020 to 30 June 2021 and approved by the **Commission**.

~~22.23~~—For the purposes of clause 21.2, the expert report must set out an assessment against **good electricity industry practice** of **Transpower's** progress towards implementing:

~~22.23.1~~ the further development of its asset health modelling, where this has not yet been sufficiently and reasonably developed in each asset health measure asset class;

~~22.23.2~~ the further development of its risk-based decision-making frameworks to enable **grid** investment decision-making to be informed by risk during **RCP3** and in preparation for the period following **RCP3**; and

~~22.23.3~~ asset life extension models where these were identified as not yet being considered sufficient.

~~22.24~~—**Transpower** must **publicly disclose** at the same time as providing its **annual compliance statement** for each **disclosure year**, a report on how **Transpower** would have performed on asset health, had the asset health been **revenue-linked grid output measures** as proposed in its **RCP3 proposal**.

Customer engagement reporting

- 22.25—**Transpower** must report for each **disclosure year**, at the same time as providing its **annual compliance statement**, on the extent and effectiveness of its consultations with **customers** and others in relation to new **base capex projects**.
- 22.26—For the purposes of clause 22.1, the report must include, without limitation:
- 22.26.1 whether and how **Transpower** consulted with **customers** and others; and
 - 22.26.2 the matters included in the consultations.
- 22.27—**Transpower** must **publicly disclose** a **customer** engagement plan for **RCP3** by 1 October 2020, with the high-level scope of the plan to be proposed by **Transpower** and provided to the **Commission** for approval.
- 22.28—For the purposes of clause 22.3, the high-level plan must be of sufficient quality to be approved by the **Commission** not later than 1 July 2020.
- 22.29—For the **disclosure year** from 1 July 2021 to 30 June 2022, **Transpower** must **publicly disclose** with its **annual compliance statement** the results of a review by an independent expert in the field of customer engagement on its proposed engagement process or processes leading up to preparation and submission of its proposal for the next **regulatory period**, where the results of the review must set out the qualifications of the independent expert in the field of **customer** engagement.

Annual cost estimation reporting

- 22.30—Subject to clause 23.3, **Transpower** must **publicly disclose**, with its **annual compliance statement**, a post-**project** review for the **disclosure year** in respect of completed significant **capex projects**, including, without limitation:
- 22.30.1 the variance between the actual **project** costs and the cost estimates for those **projects** in **Transpower's** various **capital expenditure** proposals in **RCP3 base capex projects**, for **RCP2** and **RCP3 listed projects**, and for all **major capex projects**;
 - 22.30.2 an assessment of the extent to which each **project** met the relevant measures of success established by **Transpower** prior to starting work on that **project**; and
 - 22.30.3 a detailed narrative explaining the reasons for the cost variance on **projects** that varied +/- 30% from their cost estimate.
- 22.31—For the purposes of clause 23.1:
- 22.31.1 'cost estimate' for a **project** refers to the amount **Transpower** initially proposed in its **RCP3 proposal**, its **listed project** proposal for that **project**, or the **major capex proposal** for that **project**, whichever is relevant; and

~~22.31.2 the threshold for considering a **project** a 'significant **project**' is that the **directors of Transpower** had initially been involved in approving the **project**.~~

~~22.32—For the purposes of complying with clause 23.1:~~

~~22.32.1 **Transpower** may propose to the **Commission**, for its determination, that certain information is commercially sensitive and should be held by the **Commission** in confidence; and~~

~~22.32.2 the **Commission** may determine what part, if any, of the information provided to the **Commission** as commercially sensitive may be held in confidence by the **Commission** and does not need to be **publicly disclosed**.~~

23.29. Wash-up building blocks calculation

~~23.1.29.1~~ _____ For the purposes of annually calculating the **ex-post economic gain or loss**, **Transpower** must use:

~~23.1.1.29.1.1~~ _____ the approach and formulae specified in Schedule E;

~~23.1.2.29.1.2~~ _____ the **opening RAB value**;

~~23.1.3.29.1.3~~ _____ the actual amounts by month of **commissioning** in the **disclosure year** for **value of commissioned asset** of approved **base capex** and **major capex**;

~~23.1.4.29.1.4~~ _____ the **WACC**;

~~23.1.5.29.1.5~~ _____ **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**;

~~23.1.6.29.1.6~~ _____ the **opex allowance**, excluding ~~capitalised~~ 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~~\$264.8 million~~;
- (b) for the **disclosure year** from 1 July 2021 to 30 June 2022, \$276.0 million~~\$269.2 million~~;
- (c) for the **disclosure year** from 1 July 2022 to 30 June 2023, \$286.0 million~~\$278.9 million~~;
- (d) for the **disclosure year** from 1 July 2023 to 30 June 2024, \$295.6 million~~\$288.1 million~~; and
- (e) for the **disclosure year** from 1 July 2024 to 30 June 2025, \$295.9 million~~\$288.3 million~~;

~~23.1.7—~~ the forecast **pass-through costs** set out in clause ~~3025.1.2(ii)~~;

~~23.1.8~~ the forecast **recoverable costs** set out in clause ~~3025.1.2(kj)~~;

~~23.1.9~~29.1.7 the **corporate tax rate**;

~~23.1.10~~29.1.8 the **regulatory tax allowance** calculated:

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

~~23.1.11~~29.1.9 the **term credit spread differential allowance**;

~~23.1.12~~29.1.10 for actual revenues received by **Transpower**:

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

~~23.1.13~~29.1.11 the **amount of the forecast EV adjustments recovered through included in the forecast SMAR for the relevant pricing year**;

~~23.1.14~~29.1.12 the actual **pass-through costs** and **recoverable costs** calculated in accordance with Schedule H; and

~~23.1.15~~29.1.13 any voluntary reduction in **actual transmission revenue** made by **Transpower** for the **pricing disclosure year**.

~~23.2.2~~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~~as determined is:

~~23.2.1~~29.2.1 for the **disclosure year** from 1 July 2020 to 30 June 2021, 1.90%;

~~23.2.2~~29.2.2 for the **disclosure year** from 1 July 2021 to 30 June 2022, 2.10%;

~~23.2.3~~29.2.3 for the **disclosure year** from 1 July 2022 to 30 June 2023, ~~2.00%; 2.07%~~;

~~23.2.4~~29.2.4 for the **disclosure year** from 1 July 2023 to 30 June 2024, 2.00%;2.03%; and

~~23.2.5~~29.2.5 for the **disclosure year** from 1 July 2024 to 30 June 2025, 2.00%.

24.30. Transpower to propose update of forecast SMAR

24.1~~130.1~~ **Transpower** must provide the following information when proposing an update of a **forecast MAR** and **forecast SMAR** for the purposes of clause ~~8.38.54~~no later than 80 working days from the end of the relevant disclosure year:

~~24.1.1~~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 building blocks forecast MAR in accordance with clauses ~~28.2 and 28.332~~;

~~— a certificate accompanying the proposal in the form set out in Schedule L, signed by at least two directors of Transpower;~~

~~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; ~~and~~

~~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.

~~24.2~~30.2 for the purposes of clause ~~3025.1.1~~, the calculation of the update of a ~~building blocks~~ **forecast MAR** used in calculating the update of the **forecast SMAR** must, where applicable, use:

- (a) the approach and formulae specified in Schedule D;

- (b) the forecast **opening RAB value**;
- (c) the forecast amounts by month of **commissioning** in the **disclosure year** for **value of commissioned asset** of approved **base capex** and **major capex**;
- (d) the sum of low incentive rate base capex allowances in accordance with Schedule C1, Column 7;
- ~~(d)~~(e) the standard incentive rate base capex allowance in accordance with Schedule ~~C1~~ C2, Column 7;
- ~~(e)~~(f) the **WACC**;
- ~~(f)~~(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**;
- ~~(g)~~(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**;
- ~~(h)~~(i) the **forecast EV adjustments amounts** specified in clauses 32.1.1 to 32.1.5, adjusted, where applicable, in accordance with clauses 32.2 and 32.325.1.1(c);
- ~~(i)~~(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~~];

~~(j)~~(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

~~(k)~~(l) the **opex allowance** set out in clause ~~29~~4.1.6.

~~24.3~~30.3 The calculation of an update of the **forecast SMAR**, must, where applicable, use:

~~24.3.1~~30.3.1 the update of the **building blocks forecast MAR** calculated in accordance with clause 30.2;

~~24.3.2~~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** ~~for RCP3~~ must equal the present value of the updated **building blocks 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

~~24.3.3~~30.3.3 the **IPP revenue growth rates** for each **pricing year of RCP3** as specified in clause 8.4 ~~of RCP3 is [0.7%]~~ of:

- (a) ~~For HVAC transmission revenue, 1%; and~~
- (b) ~~For HVDC transmission revenue, -1%.~~

~~24.4.30.4~~ 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:

~~24.4.130.4.1~~ 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;

~~24.4.230.4.2~~ 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

~~24.4.330.4.3~~ 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**.

~~25. Listed projects~~

~~25.1~~ The **projects** or **programmes** identified as **listed projects** for **RCP3** are set out in Schedule I.

~~25.2~~ Notwithstanding clause 26.1, if at any time during **RCP3** a **project** or **programme** identified in Schedule I, ceases to be a **base capex project** or **base capex programme**, it is no longer a **listed project** for **RCP3**.

~~26.31. EV account summary~~

~~26.131.1~~ 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:

~~26.1.131.1.1~~ a reconciliation of the opening and closing balances of the **EV account** that takes into account:

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

~~26.1.231.1.2~~ 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**;

~~26.1.3~~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**;
- (c) the after-tax gain or loss in respect of a **commodity instrument that is not an effective hedge** for the final **disclosure year of RCP2**;
- (d) the **ex-post economic gain or loss** for the **disclosure year**;
- (e) the after-tax **gain or loss on capital expenditure commitments**;
- (f) the after-tax economic gain or loss of a **grid output adjustment**, calculated in accordance with Schedule B, clause B2(1) of the **Capex IM**;
- (g) the after-tax economic gain or loss of a **base capex expenditure adjustment**, calculated in accordance with Schedule B, clause B1(1) of the **Capex IM**;
- (h) the after-tax economic gain or loss of a **major capex expenditure and output adjustment**, calculated in accordance with Schedule B, clause B3(1) of the **Capex IM**; and
- (i) the after-tax amount of a **major capex sunk costs adjustment**, calculated in accordance with clause 3.3.7 of the **Capex IM**.

~~26.2~~31.2 For the purposes of calculating **EV account entries**, **Transpower** must use:

~~26.2.1~~31.2.1 the **major capex incentive rate**;

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

~~26.2.2~~31.2.3 the **base capex low incentive rate**;

31.2.4 the **low incentive rate base capex allowances** in accordance with Schedule C3, Column 7;

~~26.2.3~~31.2.5 the **standard incentive rate base capex allowance** in accordance with Schedule C4, Column 7;

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

(d) for the **disclosure year** from 1 July 2023 to 30 June 2024, \$278.7 million; and

(e) for the **disclosure year** from 1 July 2024 to 30 June 2025, \$282.6 million;

26.2.431.2.6 the **forecast CPI** used to determine the **low incentive rate base capex allowances** and the **standard incentive rate base capex allowance** in subclause 29.2.327.2.3 **Schedule C3, Column 7 and Schedule C4, Column 7 Schedules C3 and C4**:

(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, 2.007%;

(d) for the **disclosure year** from 1 July 2023 to 30 June 2024, 2.003%; and

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

26.2.531.2.7 the **forecast FX rate** used to determine the **low incentive rate base capex allowances** and the **standard incentive rate base capex allowance** in subclause 29.2.327.2.3 **Schedules 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;

26.2.631.2.8 the **forecast FX rate** used to determine the **low incentive rate base capex allowances** and the **standard incentive rate base capex allowance** in subclause 29.2.327.2.3, **Schedule C3, Column 7 and Schedule C4, Column 7 Schedules C3 and C4** 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

~~26.2.731.2.9~~ the amount of the standard incentive rate base capex allowance
~~base capex allowance~~ to which the **forecast FX rate** applies for the purposes
of determining the standard incentive rate base capex allowance in
~~subclause 27.2.3~~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

Currency	2020/21	2021/22	2022/23	2023/24	2024/25
USD/NZD	14.6	13.4	8.3	6.5	5.6
EUR/NZD	3.7	3.3	3.8	3.3	2.9
GBP/NZD	-	-	-	-	-
AUD/NZD	0.6	0.2	0.2	0.3	0.1
JPY/NZD	0.0	0.0	0.0	0.0	0.0
SEK/NZD	0.7	0.7	0.8	0.9	1.2
CAD/NZD	-	-	-	-	-
Currency	<u>2020/21</u>	<u>2021/22</u>	<u>2022/23</u>	<u>2023/24</u>	<u>2024/25</u>
USD/NZD	<u>16.1</u>	<u>14.7</u>	<u>9.0</u>	<u>7.0</u>	<u>6.1</u>
EUR/NZD	<u>3.9</u>	<u>3.4</u>	<u>3.9</u>	<u>3.4</u>	<u>3.0</u>
GBP/NZD	=	=	=	=	=
AUD/NZD	<u>0.7</u>	<u>0.2</u>	<u>0.2</u>	<u>0.3</u>	<u>0.1</u>
JPY/NZD	<u>0.0</u>	<u>0.0</u>	<u>0.1</u>	<u>0.0</u>	<u>0.0</u>
SEK/NZD	<u>0.7</u>	<u>0.7</u>	<u>0.8</u>	<u>0.9</u>	<u>1.2</u>
CAD/NZD	=	=	=	=	=

27.32. Forecast EV adjustment

27.1.32.1 For the purposes of calculating an update of the ~~building blocks~~ forecast MAR for a **relevant pricing year**, and subject to clause 32.2, the **RCP3 forecast EV adjustments amounts** applied in calculating the initial forecast MAR_x in respect of the closing EV account balance for the final **disclosure year** of RCP2_x are:

27.1.132.1.1 for the **disclosure year** from 1 July 2020 to 30 June 2021, [~~-\$21.04~~ million];

27.1.232.1.2 for the **disclosure year** from 1 July 2021 to 30 June 2022, [~~-\$21.04~~ million];

~~27.1.3~~32.1.3 for the **disclosure year** from 1 July 2022 to 30 June 2023, [~~-\$21.0~~1 million];

~~27.1.4~~32.1.4 for the **disclosure year** from 1 July 2023 to 30 June 2024, [~~-\$21.0~~1 million];

~~27.1.5~~32.1.5 for the **disclosure year** from 1 July 2024 to 30 June 2025, [~~-\$21.0~~1 million]; and

~~27.1.6~~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.

~~27.2~~32.2 For the purpose of calculating an update of the **building blocks forecast MAR** for a **pricing year** under a reconsideration of the price path under clause ~~3.7.5(3)~~3.7.5(1) of the **Transpower IM** to account for a large buildup in EV account balance, the **forecast EV adjustments amounts** in clause 32.1 are to be adjusted so that, taking into account interest, if interest was accrued at the **RCP3 WACC** rate:

~~27.2.1~~32.2.1 the amounts of each **forecast EV adjustment** for the remaining complete pricing years of **RCP3** ~~are~~is equal; and

~~27.2.2~~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.

~~27.3~~32.3 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.

~~28.33.~~ Forecast opex for the Incremental rolling incentive scheme (IRIS)

~~28.1~~33.1 For the calculation of the **opex incentive amount**, the amount of **forecast opexrating expenditure** 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 opexrating expenditure** was initially determined ~~as specified in clause 29.2~~ and the **CPI**, ~~as specified in clause 31.3~~29.3.

~~28.2~~33.2 For the purposes of the calculation of the **opex incentive amount**, the amount of **forecast opexrating expenditure**, including operating lease payments otherwise capitalised in accordance with the Transpower IM, specified by the **Commission** is, for a **disclosure year**, as follows:

~~28.2.1~~33.2.1 for the **disclosure year** from 1 July 2020 to 30 June 2021, ~~[\$281.2 million]~~[\$277.3 million];

~~28.2.2~~33.2.2 for the **disclosure year** from 1 July 2021 to 30 June 2022, ~~[\$285.9 million]~~[\$281.8 million];

~~28.2.3~~33.2.3 for the **disclosure year** from 1 July 2022 to 30 June 2023, ~~[\$296.0 million]~~[\$291.8 million];

~~28.2.4~~33.2.4 for the **disclosure year** from 1 July 2023 to 30 June 2024, ~~[\$305.6 million]~~[\$301.3 million]; and

~~28.2.5~~33.2.5 for the **disclosure year** from 1 July 2024 to 30 June 2025, ~~[\$306.2 million]~~[\$301.6 million].

~~28.3~~33.3 For the purposes of clause ~~33.2.1~~33.2.1 and any disparity adjustments in calculating the **opex incentive amount**, the **forecast CPI** that applied when the **forecast opex allowance** was determined is the same as that set out in clause 29.2.

29.34. Independent assurance report

~~29.134.1~~ ~~Where Transpower is required to provide an independent assurance report,~~ **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:

~~29.1.134.1.1~~ 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

~~29.1.234.1.2~~ is addressed to the **directors** of **Transpower** and to the **Commission** as the intended users of the assurance report.

~~29.234.2~~ The **independent assurance report** must state:

~~29.2.134.2.1~~ that it has been prepared in accordance with Standard on Assurance Engagements 3100 – ~~Compliance Assurance~~ Engagements ~~on Compliance~~ (SAE 3100 ~~(Revised)~~) and International Standard on Assurance Engagements ~~(New Zealand)~~ 3000 (ISAE (NZ) 3000 ~~(Revised)~~) or their successor standards;

~~29.2.234.2.2~~ the work done by the **assurance auditor**;

~~29.2.334.2.3~~ the scope and limitations of the assurance engagement;

~~29.2.434.2.4~~ 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;

~~29.2.534.2.5~~ whether the **assurance auditor** has obtained sufficient recorded information and explanations that ~~it~~they required and, if not, the information and explanations not obtained;

~~29.2.634.2.6~~ 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;

~~29.2.734.2.7~~ 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

~~29.2.834.2.8~~ 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.

30.35. Exemptions

30.135.1 The **Commission** may at any time, by way of written notice to **Transpower**:

30.135.1.1 exempt **Transpower** from any of the information disclosure requirements contained in clauses [23.2.1\(b\)](#), 25, 26, and [28.1 to 28.31000010021 to 1000010023](#) of this determination, for a period and on such terms and conditions as the **Commission** specifies in the notice; and

30.135.1.2 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] \$840.9 million	N/A	N/A	N/A	N/A	[\$834.6 million] \$840.9 million	[\$831.6 million] \$842.4 million
31 March 2022 (Year 2)	30 June 2022	[\$836.6 million] \$842.2 million	\$X.X million	N/A	N/A	N/A	[\$836.6 million] \$842.2 million	[\$839.8 million] \$847.8 million
31 March 2023 (Year 3)	30 June 2023	[\$840.3 million] \$845.7 million	\$XX million	\$X.X million	N/A	N/A	[\$840.3 million] \$845.7 million	[\$848.2 million] \$853.4 million
31 March 2024 (Year 4)	30 June 2024	[\$861.9 million] \$867.0 million	\$X.X million	\$X.X million	\$X.X million	N/A	[\$861.9 million] \$867.0 million	[\$856.8 million] \$859.0 million
31 March 2025 (Year 5)	30 June 2025	[\$868.8 million] \$872.8 million	\$X.X million	\$X.X million	\$X.X million	\$X.X million	[\$868.8 million] \$872.8 million	[\$865.4 million] \$864.6 million

Schedule B: EV account summary

Item	Formula	Description
[Column 1]	[Column 2]	[Column 3]
Opening EV account balance	A	Closing balance in the EV account for the previous disclosure year
Post-tax WACC	B	The post-tax estimate corresponding to WACC
Interest on opening EV account balance	C = A x B	Opening EV account balance multiplied by the post-tax estimate corresponding to WACC
EV account entries	D	The EV account entries as specified <u>calculated in accordance with clause 31.2 in clause 29.1.3/27.1.3</u>
Post-tax amounts included in calculating the fRCP3 forecast EV adjustment for the disclosure years in respect of the closing EV account balance for the final disclosure year of RCP2	E	Amount sForecast EV adjustments for each of the 2021-2025 relevant pricing disclosure years in RCP3 in respect of the forecast closing post-tax EV account balance for the final disclosure year of RCP2 , as set out in clause 32.15 [x]28.1.1 to [x]28.1.5
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 adjustments

**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	<u>\$222.9 million</u> <u>\$207.2 million</u>	N/A	N/A	N/A	N/A	<u>\$222.9 million</u> <u>\$207.2 million</u>
30 June 2022	<u>\$277.3 million</u> <u>\$265.8 million</u>	\$XX.X million	N/A	N/A	N/A	<u>\$277.3 million</u> <u>\$265.8 million</u>
30 June 2023	<u>\$273.9 million</u> <u>\$304.3 million</u>	\$XX.X million	\$XX.X million	N/A	N/A	<u>\$273.9 million</u> <u>\$304.3 million</u>
30 June 2024	<u>\$280.0 million</u> <u>\$273.5 million</u>	\$XX.X million	\$XX.X million	\$XX.X million	N/A	<u>\$280.0 million</u> <u>\$273.5 million</u>
30 June 2025	<u>\$300.2 million</u> <u>\$323.1 million</u>	\$XX.X million	\$XX.X million	\$XX.X million	\$XX.X million	<u>\$300.2 million</u> <u>\$323.1 million</u>

**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	<u>\$206.7 million</u> \$223.6 million	N/A	N/A	N/A	N/A	<u>\$206.7 million</u> \$223.6 million
30 June 2022	<u>\$266.8 million</u> \$278.3 million	\$XX.X million	N/A	N/A	N/A	<u>\$266.8 million</u> \$278.3 million
30 June 2023	<u>\$303.3 million</u> \$275.2 million	\$XX.X million	\$XX.X million	N/A	N/A	<u>\$303.3 million</u> \$275.2 million
30 June 2024	<u>\$274.8 million</u> \$278.7 million	\$XX.X million	\$XX.X million	\$XX.X million	N/A	<u>\$274.8 million</u> \$278.7 million
30 June 2025	<u>\$347.2 million</u> \$282.6 million	\$XX.X million	\$XX.X million	\$XX.X million	\$XX.X million	<u>\$347.2 million</u> \$282.6 million

Schedule D: Forecast MAR building blocks calculation

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

FORECAST MAR BUILDING BLOCK	DESCRIPTION OF NOMINAL VALUE INPUT TO BE APPLIED	FORMULA FOR FORECAST INCOME/ EXPENDITURE/ OTHER NOMINAL VALUES	CASH FLOW TIMING FACTOR TO APPLY TO FORECAST NOMINAL VALUE INPUT	FORECAST MAR BUILDING BLOCK VALUE
[Column 1]	[Column 2]	[Column 3]	[Column 4]	[Column 5]
WACC return on forecast VCA_{FEB}	Forecast sum of value of commissioned asset for the month in the disclosure year	C8	$((1 + A1)^{136/365} - 1) / (1 + A1)^{163/365}$	$C8 \times ((1 + A1)^{136/365} - 1) / (1 + A1)^{163/365}$
WACC return on forecast VCA_{MAR}		C9	$((1 + A1)^{106.5/365} - 1) / (1 + A1)^{163/365}$	$C9 \times ((1 + A1)^{106.5/365} - 1) / (1 + A1)^{163/365}$
WACC return on forecast VCA_{APL}		C10	$((1 + A1)^{76/365} - 1) / (1 + A1)^{163/365}$	$C10 \times ((1 + A1)^{76/365} - 1) / (1 + A1)^{163/365}$
WACC return on forecast VCA_{MAY}		C11	$((1 + A1)^{45.5/365} - 1) / (1 + A1)^{163/365}$	$C11 \times ((1 + A1)^{45.5/365} - 1) / (1 + A1)^{163/365}$
WACC return on forecast VCA_{JUN}		C12	$((1 + A1)^{15/365} - 1) / (1 + A1)^{163/365}$	$C12 \times ((1 + A1)^{15/365} - 1) / (1 + A1)^{163/365}$
Total forecast capital charge	Sum of forecast MAR building block values for formulas B through C12			Sum D = Sum of forecast MAR 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	$1 / (1 + A1)^{163/365}$	$E / (1 + A1)^{163/365}$
Operating expenditure	Opex allowance as specified in clause 294.1.6.	F	$(1 + A1)^{19/365}$	$F \times (1 + A1)^{19/365}$
Forecast tax	Forecast regulatory tax allowance , calculated in accordance with clause 3025.1.2(hg)	G	$(1 + A1)^{19/365}$	$G \times (1 + A1)^{19/365}$
Forecast TCSD	Forecast term credit spread differential allowance , calculated in accordance with Part 3, Subpart 5 of the Transpower IM	H	$(1 + A1)^{19/365}$	$H \times (1 + A1)^{19/365}$
Forecast EV adjustment	Forecast EV adjustment , as specified in clauses fx 32.1.1 to 32.3, fx 30.1.528.1.5 including a tax gross up calculated at the corporate tax rate	I	$1 / (1 + A1)^{163/365}$	$I / (1 + A1)^{163/365}$

FORECAST MAR BUILDING BLOCK	DESCRIPTION OF NOMINAL VALUE INPUT TO BE APPLIED	FORMULA FOR FORECAST INCOME/ EXPENDITURE/ OTHER NOMINAL VALUES	CASH FLOW TIMING FACTOR TO APPLY TO FORECAST NOMINAL VALUE INPUT	FORECAST MAR BUILDING BLOCK VALUE
[Column 1]	[Column 2]	[Column 3]	[Column 4]	[Column 5]
Forecast pass-through costs	Forecast pass-through costs in accordance with Part 3, Subpart 1 of the Transpower IM , as specified in clauses 3025.1.2(j)(i)-(v)	J	$(1 + A1)^{19/365}$	$L \times (1 + A1)^{19/365}$
Forecast recoverable costs	Forecast recoverable costs in accordance with Part 3, Subpart 1 of the Transpower IM , as specified in clauses 3025.1.2(k)(i)-(v)	K	$(1 + A1)^{19/365}$	$M \times (1 + A1)^{19/365}$
TOTAL FORECAST MAR INCLUSIVE OF FORECAST PASS-THROUGH COSTS AND FORECAST RECOVERABLE COSTS	Sum of forecast MAR building block values			Sum L = Sum D plus sum of forecast MAR 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 opening RAB value for the disclosure year	B	A1	B x A1
WACC return on VCA _{JUL}	Sum of value of commissioned asset for the month in the disclosure year	C1	$(1 + A1)^{349.5/365} - 1$	$C1 \times ((1 + A1)^{349.5/365} - 1)$
WACC return on VCA _{AUG}		C2	$(1 + A1)^{318.5/365} - 1$	$C2 \times ((1 + A1)^{318.5/365} - 1)$
WACC return on VCA _{SEP}		C3	$(1 + A1)^{288/365} - 1$	$C3 \times ((1 + A1)^{288/365} - 1)$
WACC return on VCA _{OCT}		C4	$(1 + A1)^{257.5/365} - 1$	$C4 \times ((1 + A1)^{257.5/365} - 1)$
WACC return on VCA _{NOV}		C5	$(1 + A1)^{227/365} - 1$	$C5 \times ((1 + A1)^{227/365} - 1)$
WACC return on VCA _{DEC}		C6	$(1 + A1)^{196.5/365} - 1$	$C6 \times ((1 + A1)^{196.5/365} - 1)$
WACC return on VCA _{JAN}		C7	$(1 + A1)^{165.5/365} - 1$	$C7 \times ((1 + A1)^{165.5/365} - 1)$
WACC return on VCA _{FEB}		C8	$(1 + A1)^{136/365} - 1$	$C8 \times ((1 + A1)^{136/365} - 1)$

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

WASH-UP BUILDING BLOCK	DESCRIPTION OF NOMINAL VALUE INPUT TO BE APPLIED	FORMULA FOR INCOME/ EXPENDITURE/ OTHER NOMINAL VALUES	CASH FLOW TIMING FACTOR TO APPLY TO NOMINAL VALUE INPUT	WASH-UP VALUE
[Column 1]	[Column 2]	[Column 3]	[Column 4]	[Column 5]
Transmission revenues received	Sum of actual transmission revenue <u>converted to a disclosure year value in accordance with clause 29.1.12(a)</u>	H	$(1 + A1)^{163/365}$	$H \times (1 + A1)^{163/365}$
Transpower adjustment to recognise voluntarily foregone revenues	Amount of HVAC revenue and HVDC revenue <u>electricity transmission revenue</u> permanently foregone by Transpower	J	$(1 + A1)^{163/365}$	$J \times (1 + A1)^{163/365}$
Other regulated income	Sum of other regulated income	K	$(1 + A1)^{182/365}$	$K \times (1 + A1)^{182/365}$
Gain/(loss) on disposal of assets	Sum of disposal proceeds less opening RAB value for disposed assets	L	$(1 + A1)^{182/365}$	$L \times (1 + A1)^{182/365}$
Total income	Sum of wash-up values for formulas H to L			Sum M = sum of wash-up values H, J, K and L

WASH-UP BUILDING BLOCK	DESCRIPTION OF NOMINAL VALUE INPUT TO BE APPLIED	FORMULA FOR INCOME/ EXPENDITURE/ OTHER NOMINAL VALUES	CASH FLOW TIMING FACTOR TO APPLY TO NOMINAL VALUE INPUT	WASH-UP VALUE
[Column 1]	[Column 2]	[Column 3]	[Column 4]	[Column 5]
Operating expenditure	Opex allowance as specified in clause 294.1.6, <u>and as</u> adjusted for any disparity between the forecast CPI specified in clause 29.27.2.4 and actual CPI	N	$(1 + A1)^{182/365}$	$N \times (1 + A1)^{182/365}$
Depreciation	Depreciation (excluding depreciation on disposed assets)	O		O
TCSD	The term credit spread differential allowance , calculated in accordance with Part 3, Subpart 5 of the Transpower IM	P	$(1 + A1)^{182/365}$	$P \times (1 + A1)^{182/365}$
P Forecast pass-through costs and forecast recoverable costs	Forecast P pass-through costs and forecast recoverable costs <u>as set out in Schedule H, Formulae F and M</u> specified in clauses 25.1.2(i) and 25.1.2(j).	Q	$(1 + A1)^{182/365}$	$Q \times (1 + A1)^{182/365}$
Net operating profit/(loss) before tax	Sum of wash-up values for formulas M through P			Sum R = Sum M, less wash-up values N to Q
Tax	The regulatory tax allowance calculated in accordance with clause 294.1.108	S	$(1 + A1)^{182/365}$	$S \times (1 + A1)^{182/365}$
Net operating profit/(loss) after tax	Sum of wash-up values for formulas R Q and S R			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 <u>TS</u>)			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
Actual pass-through costs and recoverable costs	Actual pass-through costs and recoverable costs incurred by Transpower as calculated in Schedule H, Sum <u>NM</u> set out in <u>Formula Q</u> above	W	$(1 + A1)^{182/365}$	$W \times (1 + A1)^{182/365}$
Forecast pass through costs and forecast recoverable costs	Forecast pass-through costs and forecast recoverable costs as specified in clauses 25.1.2(i) and 25.1.2(j) 30.1.2(j) and 30.1.2(k).	X	$(1 + A1)^{182/365}$	$X \times (1 + A1)^{182/365}$
EV ACCOUNT ENTRY	This is the after tax 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 <u>WY</u> = Difference U plus value <u>W</u> , less values <u>and V</u> , less <u>value and X</u>

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

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

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

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

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

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

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

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

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

Schedule G: Quality standards - HVAC 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 Circuit 2
HAM_KPO_1	Hamilton–Karapiro 110 kV Circuit 1
HAM_KPO_2	Hamilton–Karapiro 110 kV Circuit 2
HAM_OHW_1	Hamilton–Ohinewai 220 kV Circuit 1
HAM_T6	Hamilton 220/110 kV Transformer T6
HAM_T9	Hamilton 220/110 kV Transformer T9
HAM_WKM_1	Hamilton–Whakamaru 220 kV Circuit 1
HAY_T1	Haywards 220/110/11 kV Transformer T1
HAY_T2	Haywards 220/110/11 kV Transformer T2
HAY_T5	Haywards 220/110/11 kV Transformer T5
HLY_SFD_1	Huntly–Stratford 220 kV Circuit 1
HLY_TWH_1	Huntly–Te Kowhai 220 kV Circuit 1
HWA_SFD_1	Hawera–Stratford 110 kV Circuit 1
ISL_KIK_1	Islington–Kikiwa 220 kV Circuit 1
ISL_LIV_1	Islington–Livingstone 220 kV Circuit 1
ISL_T3	Islington 220/66/11 kV Interconnecting Transformer T3
ISL_T6	Islington 220/66/11 kV Interconnecting Transformer T6
ISL_T7	Islington 220/66/11 kV Interconnecting Transformer T7
ISL_TKB_1	Islington–Tekapo B 220 kV Circuit 1
ISL_WPR_CUL_KIK_2	Islington–Waipara–Culverden Kikiwa 220 kV Circuit 2
ISL_WPR_CUL_KIK_3	Islington–Waipara–Culverden Kikiwa 220 kV Circuit 3
KAW_T12	Kawerau 220 /110 kV Interconnecting Transformer T12
KAW_T13	Kawerau 220 /110 kV Interconnecting Transformer T13
KIK_CB_322	Kikiwa 220 kV Line Circuit Breaker 322
KIK_CB_342	Kikiwa 220 kV Line Circuit Breaker 342

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 kvCircuit 1
OHW_WKM_1	Ohinewai–Whakamaru 220 kV Circuit 1
PAK_WKM_1	Pakuranga–Whakamaru 220 kV Circuit 1
PAK_WKM_2	Pakuranga–Whakamaru 220 kV Circuit 2
RDF_T3	Redclyffe 220/110 kV Interconnecting Transformer T3
RDF_T4	Redclyffe 220/110 kV Interconnecting Transformer T4
RPO_TNG_1	Rangip– Tangiwai 220 kV Circuit 1
RPO_WRK_1	Rangipo–Wairakei 220 kV Circuit 1
SFD_T10	Stratford 220 / 110 kV Interconnecting Transformer T10
SFD_TMN_1	Stratford–Taumarunui 220 kV Circuit 1
THI_WKM_1	Te Mihi–Whakamaru 220 kV Circuit 1
THI_WRK_1	Te Mihi–Wairakei 220 kV Circuit 1
TKB_TWZ_1	Tekapo B Twizel 220 kV Circuit 1
TKU_WKM_1	Tokaanu–Whakamaru 220 kV Circuit 1
TKU_WKM_2	Tokaanu–Whakamaru 220 kV Circuit 2
TMN_TWH_1	Taumarunui–Te Kowhai 220 kV Circuit 1
WKM_WRK_1	Whakamaru–Wairakei 220 kV Circuit 1

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

Item	Formula	Description
[Column 1]	[Column 2]	[Column 3]
Local authority rates	A	Rates payable to a local authority on system fixed assets
Commerce Act levies	B	Levies payable <u>in accordance with clause 3.1.2(2)(b)(i) of the Transpower IM</u> to the Commission
Electricity Authority levies	C	Levies payable to the Electricity Authority <u>in accordance with clause 3.1.2(2)(b)(ii) of the Transpower IM</u>
Utilities Disputes Limited levies	D	Levies payable <u>in accordance with clause 3.1.2(2)(b)(iii) of the Transpower IM</u> by all members of the Energy Complaints Scheme operated by Utilities Disputes Limited being the approved scheme under Schedule 4 of the Electricity Industry Act 2010
<u>Other pass-through costs levies</u>	<u>E</u>	<u>Any other levies that are pass-through costs in accordance with clause 3.1.2(1)(b) of the Transpower IM</u>
Total pass-through costs	F = A + B+ C+D+E	Sum of pass-through costs for the disclosure year
Incremental rolling incentive scheme recoverable costs	G	Sum of recoverable costs under the incremental rolling incentive scheme in accordance with clause 3.1.3(1)(a) of the Transpower IM
Instantaneous reserves availability charge	H	Instantaneous reserves availability charges in accordance with clause 3.1.3(1)(b) of the Transpower IM
Transmission alternative operating costs	I	Transmission alternative operating costs in accordance with clause 3.1.3(1)(c) of the Transpower IM
Operating costs incurred as part of a major capex project	J	The amount of any operating costs that are recoverable costs in accordance with clause 3.1.3(1)(d) of the Transpower IM
Net additional operating costs incurred in responding to a catastrophic event	K	The amount of recoverable costs in accordance with clause 3.1.3(1)(e) of the Transpower IM
Any levy payable to Fire and Emergency New Zealand under the Fire and Emergency New Zealand Act 2017	L	The amount of recoverable costs in accordance with clause 3.1.3(1)(f) of the Transpower IM
Total recoverable costs	M = G + H + I + J + K + L	Sum of recoverable costs for the disclosure year

Item	Formula	Description
Total pass-through costs and recoverable costs	$N = F + M$	Sum of total pass-through costs and 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 (BPE-JFD section)	21.2
Bombay - Otahuhu A reconductoring	49.5
Otahuhu - Whakamaru A and B reconductoring	33.0
Total estimated cost	156.5

Schedule J: Directors' certificate – pricing compliance statement

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

*[insert description of non-compliance if applicable]

[Signatures of directors]

[Date]

*Delete if inapplicable.

Schedule K: Directors' certificate – annual compliance statement

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.