

Transpower NZ Ltd submission on IPP draft determination 11 July 2019

Only those parts of the [draft IPP determination](#) that we comment against are shown below. Our commentary refers to the substantive policy points in our [submission](#) to the Commission's [draft decisions](#), and technical matters.

[DRAFT] Transpower Individual Price-Quality Path Determination 2020

Part 2 Defined terms

Act	Commerce Act 1986;	"Means" is missing from this and other definitions. We have not identified all instances where this omission occurs in other definitions.
AHI	means Transpower's asset health assessment for the relative health of an asset in the range between 1 and 10, where an index of 8 or above denotes an asset in poor or very poor condition;	<p>Transpower does not use the terms "poor" or "very poor" to describe assets with an index of 8 or above. The definition should convey the range and relativity of Transpower's index, similar to the way the index is presented in the RCP2 IPP.¹</p> <p>We suggest the definition reads: ... means Transpower's asset health assessment for the relative health of an asset in the range between 1 and 10, <u>where an index of 1 denotes best condition and an index of 10 denotes worst condition</u></p> <p>This comment also applies to clause 13.1.6.</p>
consumer	means any generator, distribution business, end user, or other entity in New Zealand that is connected, or applies to be connected, to the grid ;	This is the existing definition of "customer" in the RCP2 IPP. It appears the definitions of consumer and customer have been inadvertently swapped.
customer	has the meaning given in section 52C of the Act ;	<p>"Customer" is not defined in section 52C of the Commerce Act. This definition is the existing definition of "consumer" in the Capex IM, which is a defined term in section 52C.</p> <p>It appears the definitions of "consumer" and "customer" have been inadvertently swapped.</p>

¹ Transpower [Individual Price-Quality Path Determination 2015](#) clause 17.2.1 "Asset Health Index...Read scores from left to right: left-hand side scores mean better condition than right-hand side scores."

customer service measure	means a reporting measure for disclosure of the timeliness of communications and information provided to affected customers after an interruption event;	Accurate application depends on correct definitions for consumer / customer, as noted above.
electricity lines services	has the meaning given in the Act ;	Amend to “has the meaning given in <u>section 54C</u> of the Act”.
forecast MAR	means, for each relevant pricing year in RCP3 , the forecast maximum building blocks allowable revenue for a disclosure year as determined by the Commission and recorded in the list of forecast MAR in Schedule A;	<p>Throughout the document, “in RCP3” and “of RCP3” after “disclosure year” and “pricing year” are redundant because the IPP only applies to RCP3. For example, there is no “in RCP3” in the definition of forecast SMAR.</p> <p>This definition should be made consistent with the definition of forecast SMAR, as follows:</p> <p style="padding-left: 40px;">... “means for each pricing year the amount set out in Column 8 in Schedule A, or as calculated in accordance with clause 25</p> <p>Note that forecast MAR (and SMAR) are set for a pricing year, not a relevant pricing year (which is a relative term), and there is no need to refer to an amendment under clause 3.7.5 of the Transpower IM because the effect of that will be to amend the relevant column in Schedule A.</p>
forecast SMAR	means for each relevant pricing year the amount set out in Column 9 in Schedule A, or as calculated in accordance with clause 25 and amended in accordance with clause 3.7.5 of the Transpower IM ;	See comments on the definition of forecast MAR .
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 ;	<p>The pass-through and recoverable costs included as HVAC revenue should only be those allocated to HVAC transmission services. Otherwise there will be double-counting through the definition of HVDC revenue.</p> <p>We note that the RCP2 IPP uses the (undefined) terms “HVAC pass-through costs” and “HVAC recoverable costs”.</p> <p>This comment also applies to the definition of HVDC revenue.</p>
HVDC	means high voltage direct current;	See comments on the definition of HVAC revenue.

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 ;	See comments on the definition of HVAC revenue.
interruption	means the cessation of conveyance of electricity from grid assets owned by Transpower to the assets owned or operated by a customer at a point of service to the grid ;	<p>“Point of service” should be defined by reference to the definition in the Code.</p> <p>The word “from” in this definition restricts the meaning of interruption to an interruption affecting load customers. However, the term is used in the IPP with reference also to generation points of service. This is also an issue for the RCP2 IPP.</p>
outage	has the meaning set out in clause 12.130 of the Code , as amended from time to time, other than as specified in Code sub clauses 12.130(2)(c) and 12.130(2)(d), and excludes those that are: <ul style="list-style-type: none"> (a) at the request of, or caused by, a customer; and (b) due to correct operation of Transpower’s assets caused by events in the customer’s assets; 	<p>The RCP2 IPP definition of “outage” excludes outages of less than one minute. The Commission’s draft decision on RCP3 (Draft Decision) does not explain why this exclusion has been removed for RCP3. The RCP2 definition should be retained.</p> <p>Removal of the one-minute exclusion may be related to the Commission’s proposal to include a measure for momentary interruptions, which are interruptions less than one minute. However, an outage is not the same as an interruption. An outage of an asset often does not result in an interruption to the supply of electricity.</p>
publicly disclose (or public disclosure)	means to make permanently available on Transpower’s website and to notify the Commission that it has been made permanently available on Transpower’s website;	<p>The word “permanently” means the information will need to be on our website forever, which is not practicable. The word should be deleted.</p> <p>Alternatively, the definition of “publish” in the Code could be adopted, as follows:</p> <p style="padding-left: 40px;">... means to “publish”, as that term is defined in the Code for publishing by Transpower, and to notify the Commission that the relevant information has been published;</p>

RCP2	means the 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;	“Period” should be “regulatory period”, consistent with the definition of RCP3.
unplanned interruption	means any interruption for a period of one minute or longer in respect of which less than 24 hours’ notice, or no notice, was given, either to the public or to customers affected by the interruption and excludes any: <ul style="list-style-type: none"> <li data-bbox="376 632 853 804">(a) unplanned interruptions originating on another party’s system and where the Transpower grid operated correctly; and <li data-bbox="376 842 853 943">(b) unplanned interruptions to the auxiliary load used by electricity generator assets; 	We note the exclusions in clause 16.5 of the RCP2 IPP have been carried over into this definition, but not the exclusions in clause 16.6. The RCP2 exclusions are for load interruptions attributable to controllable load, interruptible load, demand response or AUFLS or where lost load is backed by embedded generation. The exclusions should be retained in the RCP3 IPP.

Part 3: Price path

<p>8. <u>Maximum revenues</u></p>	
<p>8.1 The maximum revenue that Transpower may recover for each pricing year in the RCP3 is the forecast SMAR.</p>	<p>For clarity, we propose the insertion forecast SMAR for <u>that pricing year...</u></p>
<p>8.2 The forecast HVAC revenue and forecast HVDC revenue that Transpower uses for setting charges under the TPM for the relevant pricing year must not, in aggregate, exceed the forecast SMAR</p>	<p>See comments on the definition of HVAC revenue (above). For clarity, we propose this should be “...under the TPM for <u>a pricing year</u> must not, in aggregate, exceed the forecast SMAR <u>for the pricing year.</u>”</p>
<p>8.3 When the Commission reconsiders Transpower’s individual price-quality path under clauses 3.7.4(1)(a)(v) or 3.7.4(4) of the Transpower IM and determines in accordance with clause 3.7.5 of the Transpower IM that it should be amended, Transpower must provide to the Commission at the same time as the annual compliance statement for the applicable disclosure year, a proposed updated forecast MAR and proposed updated forecast SMAR.</p>	<p>Transpower will need to provide the proposed updated forecast MAR and SMAR before the Commission determines that the IPP should be amended, not after. That is the requirement under clause 25.1 (which this clause substantively replicates, except as to timing).</p> <p>This clause (and clause 25.1) singles out changes for capex (clause 3.7.4(4) of the Transpower IM) and large build-ups in the EV account (clause 3.7.4(1)(a)(v)). This clause (and clause 25.1), if retained, should also provide for the other situations under clause 3.7.4 of the Transpower IM where the Commission may reconsider the IPP (e.g. if there is a change event).</p> <p>We consider that the proposed updated forecast MAR and SMAR should not be required to be provided at exactly the same time as the annual compliance statement (and is inconsistent with the “no later than” timing requirement in clause 25.1). This clause, if retained, should allow for the proposed updated forecast MAR and SMAR to be provided <i>no later than</i> the deadline for the annual compliance report.</p> <p>We note that there are several requirements in the draft IPP for Transpower to provide information at the same time as, or with, the annual compliance statement. We consider that all of those requirements should be changed to set</p>

	<p>a deadline rather than a specific date.² See our comments on clauses 20 and 31 about extending the information deadlines.</p> <p>Consistent with clause 8.4, this clause, if retained, should state that the proposed updated forecast MAR and SMAR must relate to “the remaining full pricing years”. We suggest the word “full” so that the partially complete pricing year during which the information is provided is clearly excluded. This comment applies to all instances of “remaining pricing years” in the draft IPP.³</p>
<p>8.4 For the purposes of clause 8.3, the proposed updated forecast SMAR must provide forecast SMAR for the remaining pricing years of RCP3 based on the calculations required in clause 25 using Schedule D, and must include any supporting information.</p>	<p>“Remaining” pricing years should be full remaining pricing years to make it clear that the partially elapsed pricing year during which the information is provided, is excluded.</p> <p>If clause 8.3 is deleted, then this clause should also be deleted.</p>
<p>9. <u>Forecast SMAR</u></p> <p>9.1 The forecast SMAR for each pricing year in RCP3, subject to any reconsideration and amendments determined by the Commission by the last day of November in each year, is specified in Schedule A.</p>	<p>This clause is redundant because the definition of forecast SMAR already refers to Schedule A, which will be updated in accordance with clause 25.</p>

² Clauses 18.1, 20.1, 20.3 to 20.8, 21.2, 21.4, 22.1, 22.5 and 23.1.

³ Clauses 8.4, 25.1.1 and 28.2.1.

Part 4: Quality standards and performance measures

<p>10. <u>Revenue-linked performance measures</u></p>	<p>Clauses 10 and 11 are integral to Transpower understanding how it must comply with important obligations. In our view the current drafting does not provide sufficient clarity.</p> <p>Clause 10 and 11 should each clearly describe what the quality standards are for GP1, GP2, AP1 and AP2.</p>
<p>10.1 For the purposes of calculating the grid output adjustment under clause 12 and the measures specified in Table 4.1 and Table 4.2, the revenue-linked grid output measures are the:</p> <p>10.1.1 measures of grid performance specified in clause 10.2;</p> <p>10.1.2 asset performance measures specified in clause 10.3</p>	
<p>10.2 For the purpose of clause 10.1.1, the measures of grid performance are:</p> <p>10.2.1 GP1, which measures the total number of unplanned interruptions for each point of service sub-category during a disclosure year; and</p> <p>10.2.2 GP2, which measures the average duration of unplanned interruptions for each point of service sub-category during a disclosure year.</p>	<p>The Commission’s draft decision to include a “normalisation mechanism” for GP1 and GP2 does not appear in the IPP.</p> <p>Normalisation policy drafting needs to be explicitly included.</p>

<p>10.3 The asset performance measures are:</p> <p>10.3.1 AP1, which measures HVDC energy availability of the HVDC poles 2 and 3 as a percentage of annual capacity during a disclosure year, as set out in Table 4.2 and as described in clauses 11.26 to 11.28. Performance is assessed each disclosure year against the quality standard specified in clause 11.27 and the reporting required under clauses 16, 18 and 20; and</p> <p>10.3.2 AP2, which measures average percentage of time that the HVAC circuits listed in Schedule G are available during a disclosure year, as set out in Table 4.2 and as described in clauses 11.30 to 11.32. Performance is assessed each disclosure year against the quality standard specified in clause 11.31 and the reporting required under clause 16, 18 and 20.</p>	<p>The terms HVDC energy availability, and HVAC circuit availability should be defined, to improve clarity for reading Table 4.2. (Table 4.2 contains the metrics for AP1 and AP2 but does not help define what HVDC energy availability or HVAC asset availability are).</p> <p>We note that:</p> <ul style="list-style-type: none"> the clause cross-references in clause 10.3.1 are incorrect. The formulae for AP1 are in clauses 11.28 and 11.29, not clauses 11.26 to 11.28; and the clause cross-references in clause 10.3.2 are incorrect. The formula for AP2 is in clause 11.32, not clauses 11.30 to 11.32. <p>Schedule G lists circuits and other assets. “HVAC assets” is therefore a more appropriate term than “HVAC circuits”. This comment applies to all clauses dealing with performance measures AP2, AP3 and AP4, including the title of Schedule G.</p> <p>There is no need for the word “average” in clause 10.3.2. AP2 is a percentage, not an average of percentages. This comment also applies to clauses 11.31 and 11.32.</p> <p>The Draft Decision to include a “normalisation mechanism” for AP1 and AP2 does not appear in the IPP. The normalisation mechanism needs to be explicitly included in the IPP.</p>
<p>11. <u>Revenue-linked quality standards and grid output measures</u></p>	<p>Clauses 10 and 11 are integral to Transpower understanding how it must comply with important obligations. In our view the current drafting does not provide sufficient clarity.</p> <p>Clause 10 and 11 should each clearly describe what the quality standards are for GP1, GP2, AP1 and AP2.</p>
<p>11.2 For the disclosure year from 1 July 2020 to 30 June 2021, Transpower must calculate assessed values for each measure of grid performance GP1 point of service sub-category measure in Table 4.1 in accordance with clauses 11.8 to 11.13.</p>	<p>Clause 11.2 could be below the sub-heading “Compliance with the GP1 quality standard” that follows it.</p> <p>The IPP should explicitly record there is no quality standard linked to GP1 for the first disclosure year (1 July 2020 to 30 June 2021).</p>

<p><i>Compliance with GP1 quality standard</i></p> <p>11.3 For the disclosure year from 1 July 2021 to 30 June 2022, Transpower must either:</p> <p>11.3.1 comply with the measure of grid performance GP1 assessment specified in clause 11.7; or</p> <p>11.3.2 have assessed values for five or more of the point of service sub-categories for the disclosure year from 1 July 2020 to 30 June 2021 which did not exceed the point of service sub-category limit specified for each of those measure of grid performance GP1 point of service sub-categories in Table 4.1, as calculated in accordance with clauses 11.8 to 11.13</p>	<p>Refer to our Submission, section 1.3 and appendix B.</p> <p>We have proposed amending the GP1 pooling approach to 3 out of 6 measures not met for 2 out of 3 years (instead of the Draft Decision’s proposed 2 out of 6 measures for the same period).</p>
<p>11.4 For the disclosure year from 1 July 2022 to 30 June 2023, Transpower must either:</p> <p>11.4.1 comply with the measure of grid performance GP1 assessment specified in clause 11.7; or</p> <p>11.4.2 have:</p> <p>(a) complied with the measure of grid performance GP1 assessment specified in clause 11.7 for the disclosure year from 1 July 2021 to 30 June 2022; and</p> <p>(b) assessed values for five or more-of the point of service sub-categories for the disclosure year from 1 July 2020 to 30 June 2021 which did not exceed the point of service sub-category limit specified for each of those measure of grid performance GP1 point of service sub-category measures in Table 4.1, as calculated in accordance with clauses 11.8 to 11.13.</p>	<p>Refer to our submission, section 1.3 and appendix B.</p> <p>We propose amending the GP1 and GP2 quality standards pooling rule to 3 out of 6 measures not met for 2 out of 3 years (instead of the draft decision’s 2 out of 6 pooling rule for the same period).</p>
<p>11.7 For the purposes of clauses 11.3 to 11.6, to comply with the measure of grid performance GP1 assessment, Transpower’s assessed value for five or more of the point of service sub-categories for the disclosure year must not exceed the point of service sub-category limit specified for the disclosure year for each of those measure of grid performance GP1 point of service sub-categories in Table 4.1</p>	<p>For clarity, there should be one clause at the start of this section stating what compliance with a GP1 measure for a disclosure year means.</p> <p>We note clauses 11.27 and 11.31 state what compliance with the AP1 and AP2 quality standards means.</p>

<p>11.8 For the purposes of clause 11.2 and 11.7, Transpower’s assessed value for point of service sub-category GP1A for a disclosure year is calculated in accordance with the formula:</p> <p style="padding-left: 40px;">GP1A assessed value = the sum of unplanned interruptions for the point of service sub-category GP1A commencing within the disclosure year.</p>	<p>Clauses 11.8 to 11.13 are repetitious, differing only by the point of service sub-category they relate to. They could be condensed.</p>
<p>11.14 For the disclosure year from 1 July 2020 to 30 June 2021, Transpower must calculate assessed values for each measure of grid performance GP2 point of service sub-categories in Table 4.1 in accordance with clauses 11.20 to 11.25</p>	<p>Clause 11.14 could be below the sub-heading “Compliance with the GP2 quality standard” that follows.</p> <p>The IPP should explicitly record there is no quality standard linked to GP2 for the first disclosure year (1 July 2020 to 30 June 2021).</p>
<p><i>Compliance with GP2 quality standard</i></p> <p>11.15 For the disclosure year from 1 July 2021 to 30 June 2022, Transpower must either:</p> <p style="padding-left: 40px;">11.15.1 comply with the measure of grid performance GP2 assessment specified in clause 11.19; or</p> <p style="padding-left: 40px;">11.15.2 have assessed values for five or more of the point of service sub-category measures for the disclosure year from 1 July 2020 to 30 June 2021 which did not exceed the point of service sub-category limit specified for each of those measure of grid performance GP2 point of service sub-category measures in Table 4.1, as calculated in accordance with clauses 11.20 to 11.25.</p>	<p>Refer to our submission, section 1.3 and appendix B.</p> <p>We propose amending the GP1 and GP2 quality standards pooling rule to 3 out of 6 measures not met for 2 out of 3 years (instead of the draft decision’s 2 out of 6 pooling rule for the same period).</p>
<p>11.19 For the purposes of clause 0 to 11.18, to comply with the measure of grid performance GP2 assessment, Transpower’s assessed value for five or more of the point of service sub-category measures for the disclosure year must not exceed the point of service sub-category limit specified for each of those measure of grid performance GP2 point of service sub-categories in Table 4.1</p>	<p>Clause cross-reference error (should read 11.15).</p>

<p>11.20 For the purposes of clauses 11.14 and 11.19, Transpower’s assessed value for point of service sub-category measure GP2A for a disclosure year is calculated in accordance with the formula:</p> <p style="padding-left: 40px;">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.</p>	<p>Clauses 11.20 to 11.25 are repetitious, differing only by the point of service sub-category they relate to. They could be condensed.</p>
<p><i>Compliance with AP1 quality standard</i></p> <p>11.26 For each disclosure year, Transpower must comply with the asset performance measure AP1 quality standard as specified in clause 11.27.</p>	
<p>11.27 For the purpose of clause 11.26, to comply with the asset performance AP1 quality standard, Transpower’s HVDC energy availability for the HVDC poles 2 and 3 for the disclosure year as calculated in accordance with clause 11.28 must be higher than the AP1 quality standard value in Table 4.2.</p>	<p>The quality standard should be “...<u>equal to or higher</u> than the AP1 quality standard value in Table 4.2.” This drafting is consistent with the RCP2 IPP, under which the AP1 quality standard is achieved if the grid output target for AP1 is hit exactly.</p>
<p>11.28 For the purposes of clause 11.27, subject to clause 11.29, the HVDC energy availability for the HVDC poles 2 and 3 for the disclosure year is calculated as a percentage term in accordance with the formula:</p> $100 - \frac{100 \sum_{j=0}^N (\text{reduction in capacity due to } \mathbf{outage\ } j) (\text{duration of } \mathbf{outage\ } j \text{ in hours})}{(\text{maximum capacity of } \mathbf{HVDC\ poles}) (\text{total number of hours in the } \mathbf{disclosure\ year})}$ <p style="padding-left: 40px;">where:</p> <p style="padding-left: 40px;"><i>j</i> is the outage that reduced capacity of the HVDC pole(s) in the disclosure year</p> <p style="padding-left: 40px;"><i>N</i> is the total number of outages associated with the HVDC poles</p>	<p>The formulae in clauses 11.28 and 11.29 are repeated in clauses 12.3.3 and 12.3.4. The repetition could be eliminated, for example by defining the term “HVDC availability” by reference to the formulae. “HVDC availability” is the language used in Table 4.2. This change would enhance document clarity.</p> <p>The variable <i>j</i> should start at 1 because there is no “outage 0”. This comment also applies to clause 12.3.3.</p>

<p>11.29 For the purposes of clause 11.27, for a maximum of 3 disclosure years of RCP3 during the life of Project k, the Project k adjustment may be added to the HVDC energy availability for the HVDC poles 2 and 3 calculated in accordance with clause 11.28, where the Project k adjustment for each disclosure year is calculated in accordance with the formula:</p> <p style="text-align: center;">Project k adjustment = the lessor of (0.07 or p)</p> <p style="text-align: center;">where:</p> $p = 100 \frac{(\text{reduction in capacity due to } \mathbf{Project\ k} \text{ related } \mathbf{outages})(\text{duration of } \mathbf{Project\ k} \text{ outage hours})}{(\text{maximum capacity of } \mathbf{HVDC\ poles}) (\text{total number of hours in the } \mathbf{disclosure\ year})}$	<p>The adjustment term has 0.07 in error, should be 0.7</p> <p>Project K adjustment = the lesser of (0.7 or p)</p> <p>Alternatively, the formula could be expressed as:</p> <p style="text-align: center;">Project k adjustment = min [0.7, p]</p> <p>This clause should clarify that “Project k related outages” (used in the numerator of the formula) only includes outages that reduce the capacity of the HVDC pole(s).</p>
<p><i>Compliance with AP2 quality standard</i></p> <p>11.30 For each disclosure year, Transpower must comply with the asset performance measure AP2 quality standard as specified in clause 11.31</p>	
<p>11.31 For the purpose of clause 11.30, to comply with the asset performance AP2 quality standard, Transpower’s average percentage of the time that the HVAC circuits listed in Schedule G are available during the disclosure year as calculated in accordance with clause 11.32 must be higher than the AP2 quality standard value in Table 4.2.</p>	<p>Change “HVAC circuits” to “HVAC assets”.</p> <p>The quality standard should be “...<u>equal to or higher</u> than the AP2 quality standard value in Table 4.2.” This would be consistent with the RCP2 IPP, under which the AP2 quality standard is achieved if the grid output target for AP2 is hit exactly.</p> <p>There is no need for the word “average”. The HVAC availability measure is a percentage, not an average of percentages. The same comment applies to clause 11.32.</p>
<p>11.32 For the purposes of clause 11.31, the average percentage of the time that the HVAC circuits are available during the disclosure year is calculated as a percentage term in accordance with the formula:</p> $100 - \frac{100(\text{total duration (in hours) of all } \mathbf{outages} \text{ on the } \mathbf{HVAC} \text{ circuits listed in Schedule G)}}{(\text{number of } \mathbf{HVAC} \text{ circuits listed in Schedule G}) (\text{total number of hours in the } \mathbf{disclosure\ year})}$	<p>The formula in clause 11.32 is repeated in clause 12.3.5. The repetition could be eliminated, for example by defining the term “HVAC availability” by reference to the formula. “HVAC availability” is the language used in Table 4.2.</p>

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

Refer to our submission, appendix E. Some of the incentive rates in the draft decision are incorrect and we provide corrections. Two unit headings are in the wrong column: \$ per event and \$ per min.

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 event	\$ per event
GP1A: N-1 security high economic consequence	0	7	14	14	421,429 209,524
GP1B: N-1 security material economic consequence	7	24	41	41	50,000 22,902
GP1C: N security high economic consequence	4	6	8	8	325,000 133,334
GP1D: N security material economic consequence	9	23	37	37	53,571 22,400
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 min	\$ per min
GP2A: N-1 security high economic consequence	30	92	154	154	47,581 47,312
GP2B: N-1 security material economic consequence	36	61	86	86	34,000 31,147
GP2C: N security high economic consequence	0	103	206	206	6311
GP2D: N security material economic consequence	0	140	280	280	5,357
GP2E: N-1 security generator	50	174	298	298	2,016
GP2F: N security generator	11	93	175	175	3,049

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

Refer to our submission section 7.3. For AP1, the annual forced outage allowance should not be reduced from 0.5% to 0.25%. The incentive rates for AP1 and AP2 are incorrect, from table F17 in the draft decisions the rates should be \$400,000 per 1% for AP1 and \$4,000,000 per 1% for AP2.

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	350,000 400,000
Comment					
AP2: HVAC availability (%)					\$ per 1%
HVAC availability (71 selected assets)	99.2	99.0	98.8	98.6	3,500,000 4,000,000

12. <u>The grid output adjustment</u>	
<p>12.3 For the purposes of calculating the grid output adjustment, the output achieved is:</p> <p>12.3.1 for each of the point of service sub-category measures GP1A, GP1B, GP1C, GP1D, GP1E and GP1F, the total number of all unplanned interruptions in the disclosure year;</p> <p>12.3.2 for each of the point of service sub-category measures GP2A, GP2B, GP2C, GP2D, GP2E and GP2F, the sum of the durations of all unplanned interruptions in the disclosure year divided by the total number of unplanned interruptions in the disclosure year</p>	<p>“Point of service sub-category measure” is not a defined term. Remove the bolding.</p> <p>For consistency, “in the disclosure year” should be “commencing within the disclosure year” (see clauses 11.8 to 11.13 and 11.20 to 11.25).</p>

<p>12.3.3 for asset performance measure AP1, subject to clause 12.3.4, the HVDC energy availability for the HVDC poles 2 and 3 is calculated as a percentage term in the following manner:</p> $100 - \frac{100 \sum_{j=0}^N (\text{reduction in capacity due to } \mathbf{outage\ } j) (\text{duration of } \mathbf{outage\ } j \text{ in hours})}{(\text{maximum capacity of } \mathbf{HVDC\ poles}) (\text{total number of hours in the } \mathbf{disclosure\ year})}$ <p>where:</p> <p><i>j</i> is the outage that reduced capacity of the HVDC pole(s) in the disclosure year</p> <p><i>N</i> is the total number of outages associated with the HVDC poles; and</p>	<p>The formulae in clauses 11.28 and 11.29 are repeated here in clauses 12.3.3 and 12.3.4.</p> <p>The repetition should be able to be eliminated, for example by defining the term “HVDC availability” by reference to the formulae. “HVDC availability” is the language used in Table 4.2.</p> <p>The variable <i>j</i> should start at 1 because there is no “outage 0”.</p>
<p>12.3.4 For the purposes of clause 12.3.3, for a maximum of 3 disclosure years of RCP3 during the life of Project k, the Project k adjustment may be added to the HVDC energy availability for the HVDC poles 2 and 3 calculated in accordance with clause 12.3.3, where the Project K adjustment for each disclosure year is calculated in accordance with the formula:</p> <p>Project k adjustment = the lessor of (0.07 or <i>p</i>)</p> <p>where:</p> $p = 100 \frac{(\text{reduction in capacity due to } \mathbf{Project\ } k \text{ related } \mathbf{outages}) (\text{duration of } \mathbf{Project\ } k \text{ outage hours})}{(\text{maximum capacity of } \mathbf{HVDC\ poles}) (\text{total number of hours in the } \mathbf{disclosure\ year})}$ <p>12.3.5 for asset performance measure AP2, the percentage term calculated as:</p> $100 - \frac{100(\text{total duration (in hours) of all } \mathbf{outages\ on\ the\ HVAC\ circuits\ listed\ in\ Schedule\ G\ })}{(\text{number of } \mathbf{HVAC\ circuits\ listed\ in\ Schedule\ G\ }) (\text{total number of hours in the } \mathbf{disclosure\ year})}$	<p>The adjustment term has 0.07 in error, should be 0.7</p> <p>Project K adjustment = the lesser of (0.7 or <i>p</i>)</p> <p>Alternatively, the formula could be expressed as:</p> <p>Project k adjustment = min [0.7, <i>p</i>]</p> <p>Clarify that “Project k related outages” only include outages that reduce the capacity of the HVDC pole(s).</p>

<p>13. <u>Performance measures not linked to revenue</u></p> <p>13.1 The performance measures not linked to revenue are the:</p> <p>13.1.1 measure of grid performance GP-M, which measures reliability through the number of momentary interruptions. Performance is assessed each disclosure year against the quality standard specified in clause 14.2 and the reporting required under clauses 16, and 20.5.</p>	<p>Refer submission section 1.4.</p> <p>GP-M should not be a quality standard. Reporting should only be on trends, insights and notable events.</p>
<p>13.1.2 asset performance measure AP3, which measures the extent to which Transpower meets estimated return to service times for planned outages of the HVAC circuits set out in Schedule G. Performance is assessed for each disclosure year against the reporting required under clause 18.1.2.</p>	<p>Replace HVAC circuits with HVAC assets</p> <p>Performance against AP3 is not “assessed” because it is not revenue-linked or a quality standard. AP3 performance is only reported.</p> <p>We propose the second sentence be: “Performance for each disclosure year is reported under clause 18.1.2.”</p> <p>The same comment applies to clauses 13.1.3 (AP4), 13.1.4 (AP5) and 13.1.5 (CS1).</p>
<p>13.1.3 asset performance measure AP4, which measures the extent to which Transpower communicates delays to affected parties of planned outage return to service times of the HVAC circuits set out in Schedule G. Performance is assessed each disclosure year with the reporting required under clause 18.1.3.</p>	<p>Replace ‘HVAC circuits’ with ‘HVAC assets’</p>
<p>13.1.4 asset performance measure AP5, which measures the extent that Transpower has placed customers on N-security of supply. Performance is assessed each disclosure year with the reporting required under clause 18.1.4.</p>	<p>Refer to our submission section 6.3.2</p> <p>We do not support the Commission’s draft decision to adopt trial RCP2 measure (PMD5) as AP5 in RCP3.</p> <p>“N-security” is not a defined term, so should not be bolded.</p> <p>See comment on clause 13.1.2.</p>

<p>13.1.5 customer service measure CS1, which relates to the timeliness of post-interruption event communication and information provided to affected customers. Performance is assessed each disclosure year through an event survey with affected customers following the event as described in clause 18.1.5.</p>	<p>Refer to our Submission, section 6.3.2.</p> <p>For clarity, delete “following the event” as it suggests a requirement for a customer survey after every interruption, which we would not do.</p> <p>CS1 should be limited to unplanned interruptions, consistent with the Benchmark Agreement under part 12 of the Code.</p>
<p>13.1.6 asset health measure AH, which measures the percentage of assets with AHI of 8 or greater (assets in poor or very poor condition) in each asset health measure asset class. Performance is assessed each disclosure year against the quality standards described in clauses 14.3 to 14.9 and the reporting required under clauses 16.2.4(k) and 20.8.</p>	<p>Refer to our Submission, section 1.2 and appendix A. We encourage the Commission to adopt our alternative asset health proposal for reporting only.</p> <p>Transpower does not use the terms “poor” or “very poor” to describe assets with an index of 8 or above. Delete “assets in poor or very poor condition.”</p> <p>See definition for AHI.</p>

<p>14. <u>Quality standards not linked to revenue</u></p> <p>14.1 For each disclosure year, Transpower must comply with the measure of grid performance GP-M quality standard specified in clause 14.2.</p>	<p>Refer submission section 1.4.</p> <p>GP-M should not be a quality standard.</p> <p>Reporting should only be on trends, insights and notable events</p> <p>Clause 14.1 should be deleted.</p>
<p>14.2 For the purposes of clause 14.1, to comply with the measure of grid performance GP-M quality standard, Transpower must not have more than 116 momentary interruptions in the disclosure year.</p>	<p>Refer submission section 1.4.</p> <p>GP-M should not be a quality standard.</p> <p>Reporting should only be on trends, insights and notable events</p> <p>Clause 14.2 should be deleted.</p>
<p>14.3 For each disclosure year, Transpower must comply with the asset health measure AH quality standard for each asset health measure asset class described in clauses 14.4 to 14.9 and Table 4.3.</p>	<p>See submission, section 1 and Appendix A.</p> <p>We encourage the Commission to adopt our alternative asset health proposal for reporting only.</p> <p>14.3 should be deleted. Note Table F12 in the Draft Decision says compliance against this quality standard (if retained) is to be assessed “at the end of RCP3”, not “for each disclosure year.”</p>

<p>14.4 For the purposes of clause 14.3, to comply with the asset health quality standard, Transpower’s assessed value for each asset health measure asset class must not be higher than the quality standard specified for that asset health measure asset class in Table 4.3.</p>	<p>Refer submission, section 1 and Appendix A</p> <p>We encourage the Commission to adopt our alternative asset health proposal for reporting only.</p> <p>14.4 should be deleted.</p> <p>(If the clause remains) it should say “...Transpower’s assessed value <u>of the asset health measure AH</u> for each asset health measure class...”</p>
<p>14.5 For the purposes of clause 14.4, Transpower’s assessed value for tower grillage foundation for each disclosure year is calculated in accordance with the formula:</p> <p>Tower grillage foundation assessed value =</p> $\frac{\text{the sum of all tower grillage foundation assets with an AHI of 8 or higher}}{\text{the sum of all tower grillage foundation assets}} \times 100$	<p>Clauses 14.5 to 14.9 are largely repetitious, differing only by the asset class they relate to. They could be condensed.</p>

Table 4.3: ~~Quality standards for~~ Percentage of class at Asset Health Index 8 or more, by disclosure year

Refer to our Submission, section 1.2 and appendix A. We encourage the Commission to adopt our alternative asset health proposal for reporting only

Clarity would be improved by inserting a descriptor for the table entries e.g. % of class at Asset Health Index 8 or more.

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

16. <u>Annual compliance statement</u>	
<p>16.2 The annual compliance statement must:</p> <p>16.2.1 state whether or not Transpower has:</p> <ul style="list-style-type: none"> (a) complied with the price path in Part 3 for the disclosure year; (b) complied with the quality standards in Part 4; (c) complied with the requirement to publicly disclose, in accordance with the ID determination, its annual grid output adjustment calculation for the disclosure year, including the values for 'm' calculated in accordance with Schedule B, clause B2(1) of the Capex IM; (d) complied with requirements related to grid output adjustment calculations and public disclosure; and (e) complied with requirements related to wash-up calculations and public disclosure 	See comment on definition of public disclosure
16.2.4 include, information on performance against the following performance measures:	
<ul style="list-style-type: none"> (e) for measure of grid performance GP-M: the quality standard for the disclosure year; (f) for measure of grid performance GP-M: the number of momentary interruptions for the disclosure year; 	<p>GP-M should not be a quality standard. Refer submission section 1.4 and 6.3.2.</p> <p>Clause 16.2.4 (e) should be deleted.</p>
<ul style="list-style-type: none"> (i) for asset performance measure AP2: the average percentage of the time that Transpower's HVAC circuits listed in Schedule G are available during the disclosure year and the quality standard for the disclosure year; 	Replace HVAC circuits with HVAC assets
<ul style="list-style-type: none"> (k) for asset health measure AH: the assessed value and quality standard for each asset health measure asset class for the disclosure year; 	<p>Refer submission, section 1 and Appendix A. We encourage the Commission to adopt our alternative asset health proposal for reporting only.</p> <p>Clause 16.2.4 (k) should be deleted.</p>

<p>17. <u>Annual compliance statement – information required</u></p>	
<p>17.1.11 a summary of pass-through costs and recoverable costs as set out in Schedule H, including:</p> <p>(f) an explanation for the opex incentive amount for the disclosure year;</p>	<p>This sub clause should be deleted as it is not possible to comply with it. The opex incentive amount is the sum of incremental changes between multiple pairs of adjacent years in RCP2, together with (for all but 2020/21) a proportion of the baseline adjustment term and base year adjustment term. By its nature there can be no meaningful explanation for the opex incentive amount in any given disclosure year.</p>
<p>18. <u>Information to accompany the annual compliance statement</u></p>	
<p>18.1.4 asset performance measure AP5 – the extent that Transpower has placed customers on N security of supply, including:</p> <p>(a) when this has occurred;</p> <p>(b) how long customers were reduced to N security of supply;</p> <p>(c) the level of demand at the grid exit point(s) affected by the reduced N security of supply; and</p> <p>(d) the steps Transpower took to inform affected customers;</p>	<p>Refer to our submission section 6.3.2 and 7.5.2</p> <p>We do not support the Commission’s draft decision to adopt trial RCP2 measure (PMD5) as AP5 in RCP3.</p> <p>Reporting on this measure would not provide customers, consumers and the Commission with valuable insights</p> <p>Clause 18.1.4 should be deleted.</p>
<p>18.1.5 customer service measure CS1 – the results of post-interruption event surveys of customers affected by interruptions.</p>	<p>See submission section 6.3.2</p> <p>Our reporting should be anonymised.</p>
<p>19. <u>Periodic reporting for performance events</u></p> <p>19.1 For each unplanned interruption during a disclosure year which lasts 12 hours or more, Transpower must publicly disclose within 42 working days of the unplanned interruption:</p>	<p>There should be a general provision under which Transpower can apply for more time to meet a reporting requirement if reasonably justified.</p>

<p>19.1.1 the cause of the unplanned interruption;</p> <p>19.1.2 the start date and time of the unplanned interruption;</p> <p>19.1.3 the end date and time of the unplanned interruption;</p> <p>19.1.4 the megawatts affected by the unplanned interruption;</p> <p>19.1.5 the grid exit point(s) and grid injection point(s) affected by the unplanned interruption;</p> <p>19.1.6 actions Transpower took to minimise the effect of the unplanned interruption; and</p> <p>19.1.7 lessons Transpower has learned as a result of the unplanned interruption.</p>	<p>Refer submission section 6.2. We understood the reporting requirement was for interruptions “both longer than 12 hours and which cause loss of supply greater than one system minute.”</p> <p>We supported the draft decision based on our interpretation that the requirement was for both conditions (greater than one system minute, and greater than 12 hours) met at the same time.</p> <p>Consistent with our interpretation, we suggest the following change made to clause 19.1:</p> <p>For each unplanned interruption during a disclosure year which lasts 12 hours or more <u>and is over one system minute</u>, Transpower must...</p>
<p>19.2 For each interruption during a disclosure year over one system minute, Transpower must publicly disclose within 42 working days of the interruption:</p> <p>19.2.1 the cause of the interruption;</p> <p>19.2.2 the start date and time of the interruption;</p> <p>19.2.3 the end date and time of the interruption;</p> <p>19.2.4 the megawatts affected by the interruption;</p> <p>19.2.5 the grid exit point(s) and grid injection point(s) affected by the interruption;</p> <p>19.2.6 actions Transpower took to minimise the effect of the interruption; and</p> <p>19.2.7 lessons Transpower has learned as a result of the interruption.</p>	<p>In the Draft Decision the interruption reporting requirement is expressly linked to GP1 and GP2, which relate to unplanned interruptions only (for example, table F2, page 116).</p> <p>This reporting should be only for unplanned interruptions and not for planned interruptions.</p>

<p>20. <u>Annual reporting for performance events</u></p> <p>20.1 Transpower must publicly disclose a report by an engineer at the time of providing its annual compliance statement for a disclosure year where Transpower has not complied with any of the following quality standards:</p> <p>20.1.1 measure of grid performance GP1, where the quality standard is specified in clauses 11.3 to 11.6;</p> <p>20.1.2 measure of grid performance GP2, where the quality standard is specified in clauses 11.15 to 11.19;</p> <p>20.1.3 asset performance measure AP1, where the quality standard is specified in clause 11.26; and</p> <p>20.1.4 asset performance measure AP2, where the quality standard is specified in clause 11.30.</p>	<p>See submission section 6.2.2.</p> <p>For all reports, other than the compliance statements under clause 16, we propose a standard 120 days and a general provision under which Transpower can apply for more time to meet a reporting requirement if reasonably justified.</p> <p>For consistency with clause 10.3, the cross-references to 11.26 and 11.30 should be to 11.27 and 11.31.</p>
<p>20.5 Where Transpower has not complied with the measure of grid performance GP-M in accordance with clauses 14.1, it must publicly disclose at the same time as its annual compliance statement:</p> <p>20.5.1 the cause of each momentary interruption;</p> <p>20.5.2 the start date and time of each momentary interruption;</p> <p>20.5.3 the end date and time of each momentary interruption;</p> <p>20.5.4 the megawatts affected by each momentary interruption; and</p> <p>20.5.5 the grid exit point(s) and grid injection point(s) affected by each momentary interruption.</p>	<p>Refer submission section 1.4.</p> <p>GP-M should not be a quality standard.</p> <p>See submission section 6.2.2 For all reports, other than the compliance statements under clause 16, we propose a standard 120 days along with a general provision under which Transpower can apply for more time to meet a reporting requirement if reasonably justified.</p> <p>Clause 20.5 should be deleted.</p>
<p>20.8 Where Transpower has not complied with the asset health quality standard for an asset health measure asset class, as specified in clause 14.3, it must publicly disclose at the same time as its annual compliance statement:</p> <p>20.8.1 reasons for not meeting the quality standard and supporting evidence for those reasons; and</p> <p>20.8.2 measures that have been put in place to prevent future non-compliance with the quality standard.</p>	<p>See submission, section 1 and Appendix A.</p> <p>We encourage the Commission to adopt our asset health assessment approach.</p> <p>Clause 20.8 should be deleted.</p>

<p>21. <u>Asset health initiatives reporting</u></p>	
<p>21.2 For the disclosure year from 1 July 2021 to 30 June 2022, Transpower must publicly disclose a report from an independent expert on asset management in accordance with terms of reference which are to be proposed by Transpower at the same time as its annual compliance statement for disclosure year from 1 July 2020 to 30 June 2021 and approved by the Commission.</p>	<p>Refer to our Submission, section 6.4.2.</p> <p>The drafting should be amended to reflect that the independent expert is to report on asset and network risk <u>modelling</u>, not asset management.</p> <p>For clarity, separate this paragraph into two paragraphs. The first would deal with the process and time frame for Transpower to prepare and agree terms of reference with the Commission. The second would deal with the timeframe and process for disclosing the report.</p> <p>Transpower should be able propose the terms of reference to the Commission <i>before</i> the date for the 2021 annual compliance statement.</p>
<p>21.3 For the purposes of clause 21.2, the expert report must set out an assessment against good electricity industry practice of Transpower’s progress towards implementing:</p> <p>21.3.1 the further development of its asset health modelling, where this has not yet been sufficiently and reasonably developed in each asset health measure asset class;</p> <p>21.3.2 the further development of its risk-based decision-making frameworks to enable grid investment decision-making to be informed by risk during RCP3 and in preparation for the period following RCP3; and</p> <p>21.3.3 asset life-extension models where these were identified as not yet being considered sufficient.</p>	<p>Refer submission section 6.4.2</p> <p>Clause 21.3 should clarify that the assessment relates to “progress <u>against the plan referred to in clause 21.1.</u>”</p>

<p>22. <u>Customer engagement reporting</u></p> <p>22.1 Transpower must report for each disclosure year, at the same time as providing its annual compliance statement, on the objectives for and extent and effectiveness of its consultations with customers and others in relation to new base capex projects.</p> <p>22.2 For the purposes of clause 22.1, the report must include, without limitation:</p> <p>22.2.1 whether and how Transpower consulted with customers and others; and</p> <p>22.2.2 the matters included in the consultations.</p>	<p>The reference to “effectiveness” should be deleted from clause 22.1. The standard is subjective and depends as much on customers’ willingness to engage than anything that is within Transpower’s control. Our reporting should be limited to the objectives for, and extent of, our customer consultations.</p> <p>The words “without limitation” should be deleted from clause 22.2. Combined with the word “must”, the words suggest there are additional, unspecified minimum requirements the Commission may impose on Transpower. This comment also applies to clause 23.1.</p>
<p>22.5 For the disclosure year from 1 July 2021 to 30 June 2022, Transpower must publicly disclose with its annual compliance statement the results of a review by an independent expert in the field of customer engagement on its proposed engagement process or processes leading up to preparation and submission of its proposal for the next regulatory period, where the results of the review must set out the qualifications of the independent expert in the field of customer engagement</p>	<p>The review need not be tied to the timing of the annual compliance statement.</p> <p>Refer submission, section 8 summary table. We state, “A variety of technical changes will be suggested in our response to the draft IPP for some of the new reports, to enhance clarity and assure value”.</p> <p>In our view, the role for an independent expert should be to create better value to assist our development of a ‘good practice’ stakeholder engagement plan for RCP4.</p> <p>The second instance of “customer” should not be bolded. The independent expert may not be an expert on engagement for electricity transmission customers.</p>

<p>23. <u>Annual cost estimation reporting</u></p> <p>23.1 Subject to clause 23.3, Transpower must publicly disclose, with its annual compliance statement, a post-project review for the disclosure year in respect of completed significant capex projects, including, without limitation:</p> <p>23.1.1 the variance between the actual project costs and the cost estimates for those projects in Transpower's various capital expenditure proposals in RCP3 base capex projects, for RCP2 and RCP3 listed projects, and for all major capex projects;</p> <p>23.1.2 an assessment of the extent to which each project met the relevant measures of success established by Transpower prior to starting work on that project; and</p> <p>23.1.3 a detailed narrative explaining the reasons for the cost variance on projects that varied +/- 30% from their cost estimate.</p>	<p>Consistent with where the Commission's concerns lie, annual cost estimation reporting should only be required for non-volumetric projects.</p> <p>Also, the review should only relate to capex projects completed during the relevant disclosure year.</p> <p>We propose that the following change to the first paragraph:</p> <p style="padding-left: 40px;">...in respect of <u>significant capex projects (other than volumetric capex projects) completed during the disclosure year</u>, including...</p> <p>The words 'without limitation' should be deleted, as they imply unwritten requirements and unlimited scope, creating compliance risk for Transpower.</p>
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<p>25. <u>Transpower to propose update of forecast SMAR</u></p>	
<p>25.2 The calculation of an update of the forecast SMAR, must, where applicable, use:</p> <p>25.2.3 IPP revenue growth rates for each pricing year of RCP3 of:</p> <p>(a) For HVAC, 1%; and</p> <p>(b) For HVDC, -1%.</p>	<p>This calculation should be clarified. We think (but are unsure) the percentages are placeholders that will be replaced with the actual percentages for the RCP3 forecast SMAR, to be determined in November 2019. Is our view correct?</p>

<p>27. <u>EV account summary</u></p>	
<p>27.2 For the purposes of calculating EV account entries, Transpower must use:</p> <p>27.2.1 the major capex incentive rate;</p> <p>27.2.2 the base capex standard incentive rate;</p> <p>27.2.3 the base capex allowance in accordance with Schedule C2:</p> <p>(a) for the disclosure year from 1 July 2020 to 30 June 2021, \$223.6 million;</p> <p>(b) for the disclosure year from 1 July 2021 to 30 June 2022, \$278.3 million;</p> <p>(c) for the disclosure year from 1 July 2022 to 30 June 2023, \$275.2 million;</p> <p>(d) for the disclosure year from 1 July 2023 to 30 June 2024, \$278.7 million; and</p> <p>(e) for the disclosure year from 1 July 2024 to 30 June 2025, \$282.6 million;</p>	<p>Subclauses (a) to (e) of clauses 27.2.3 should be deleted because updates to Schedule C2 will change those numbers.</p> <p>See clause 25.1.2(d) (reference to Schedule C1</p>
<p>27.2.5 the forecast FX rate used to determine the base capex allowance in subclause 27.2.3, for the conversion of US dollars to NZ dollars:</p> <p>(a) for the disclosure year from 1 July 2020 to 30 June 2021, 0.66;</p> <p>(b) for the disclosure year from 1 July 2021 to 30 June 2022, 0.66;</p> <p>(c) for the disclosure year from 1 July 2022 to 30 June 2023, 0.66;</p> <p>(d) for the disclosure year from 1 July 2023 to 30 June 2024, 0.66; and</p> <p>(e) for the disclosure year from 1 July 2024 to 30 June 2025, 0.66;</p>	<p>This clause could be condensed (as per clause 27.2.6) because the rates are the same for all disclosure years.</p>

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

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

<p>28. <u>Forecast EV adjustment</u></p> <p>28.1 For the purposes of calculating an update of the building blocks forecast MAR for a relevant pricing year, and subject to clause 28.2, the RCP3 forecast EV adjustments applied in the initial forecast MAR in respect of the closing EV account balance for the final disclosure year of RCP2 are:</p> <p>28.1.1 for the disclosure year from 1 July 2020 to 30 June 2021, -\$21.1 million;</p> <p>28.1.2 for the disclosure year from 1 July 2021 to 30 June 2022, -\$21.1 million;</p> <p>28.1.3 for the disclosure year from 1 July 2022 to 30 June 2023, -\$21.1 million;</p> <p>28.1.4 for the disclosure year from 1 July 2023 to 30 June 2024, -\$21.1 million;</p> <p>28.1.5 for the disclosure year from 1 July 2024 to 30 June 2025, -\$21.1 million; and</p> <p>28.1.6 a tax gross-up amount calculated at the corporate tax rate, and applying the tax rules where applicable, in respect of all after-tax amounts calculated in subclauses 28.1.1 to 28.1.5 in order to express the forecast EV adjustments on a pre-tax basis in the forecast MAR building block inputs.</p>	<p>This clause could be condensed because the forecast EV adjustments are the same for all disclosure years.</p>
<p>28.2 For the purpose of calculating an update of the building blocks forecast MAR for a pricing year under a reconsideration of the price path under clause 3.7.5(1) of the Transpower IM, the forecast EV adjustments in clause 28.1 are to be adjusted so that, taking into account interest, if interest was accrued at the RCP3 WACC rate:</p> <p>28.2.1 the amount of each forecast EV adjustment for the remaining pricing years of RCP3 are equal; and</p> <p>28.2.2 if the same annual forecast EV adjustment was applied for each of the five pricing years following the end of RCP3, the forecast balance of the EV account would be zero at the end of that period.</p>	<p>This clause is unclear. We deduce that the objective is to spread the impact of a catastrophic event evenly over the (full) remaining years of RCP3 and all of RCP4. As currently drafted, the clause does not achieve that objective. We suggest the clause is written to state its objective in lieu of specifying the maths.</p>

<p>31. <u>Exemptions</u></p> <p>31.1 The Commission may at any time, by way of written notice to Transpower:</p> <p>31.1.1 exempt Transpower from any of the information disclosure requirements contained in clauses 18, 19, and 21 to 23 of this determination, for a period and on such terms and conditions as the Commission specifies in the notice; and</p> <p>31.1.2 amend or revoke any such exemption.</p>	<p>See submission section 6.2. for the first point below.</p> <p>31.2 The Commission may under clause 31.1:</p> <p>31.2.1 extend the time period for Transpower to comply with any of the information disclosure requirements contained in clauses 18 to 23 and 25 on such terms and conditions as the Commission specifies in the notice; or</p> <p>31.2.2 exempt Transpower from an obligation to publicly disclose any information on such terms and conditions as the Commission specifies in the notice.</p> <p>The type of exemption referred to in proposed clauses 31.2.2 may be needed (for example) for commercially sensitive information or information that may prejudice the security of the grid if disclosed.</p>
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Schedule E: Wash-up building blocks calculation

<p>EV ACCOUNT ENTRY</p>	<p>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</p>	<p>Difference Y = Difference U plus value W, less values V and X</p>	<p>This equation should read “Difference Y = Difference U plus values W and V, less value X” This is also an error in the RCP2 IPP, which we have previously raised with the Commission.</p>
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Schedule G: ~~Quality standards~~— HVAC circuits for asset performance measure AP2

Schedule G describes circuits and other assets, so the term should be HVAC assets, not HVAC circuits. For accuracy, remove term 'quality standards'. For clarity, insert the word 'availability' after AP2 in the title.

Schedule H: Pass-through costs and recoverable costs summary

The table should have another row for 'other levies' referred to in clauses 3.1.2(1)(b) of the Transpower IMs.

Schedule I: Listed projects

Please remove the parentheses for the *Bunnythorpe - Wilton A* reconductoring to be consistent with the information in our [base capex proposal](#) Table 11.