



**TRANSPOWER**

*Keeping the energy flowing*

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## Revised draft IPP and three section 53ZD notices

Transpower appreciates the opportunity to respond to the revised draft IPP and the accompanying three section 53ZD notices that give effect to final decisions for Regulatory Control Period 3 (RCP3). We note that some elements of the final decision introduce new detail on policy, so our review and commentary is not solely confined to technical drafting points.

In 2018 we published *Te Mauri Hiko – Energy Futures*, highlighting opportunities and challenges of decarbonising the energy sector and steering the conversation towards a sustainable energy future for New Zealand. Changes to levels of renewable generation and potential electrification of transportation and process heat will bring about challenges for when, where, and what demand or generation will arise. Our [RCP3 proposal](#) later in 2018 reflected the importance of managing transmission costs while sustaining capability in the National Grid to support future opportunities for New Zealand.

The Commission's decisions for our RCP3 revenue, service quality and business activities create the platform for our navigation through the energy transition through RCP3 and subsequent regulatory periods. Our comments in this submission have reflected the scheme the Commerce Act 1986, its broader provisions, and the Section 1A and Part 4 purpose.<sup>1</sup> While we support the Commission's focus on cost estimation, asset health modelling development, and effective customer consultation, we consider that more flexibility in the reporting regimes will better achieve the objectives of Part 4 by acknowledging and providing for the changing energy landscape.

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<sup>1</sup> Refer Sections 1A and 52A Commerce Act 1986. The objectives are for the long-term benefit of consumers, via incentives to innovate and invest, delivering service quality that meets consumer demands, sharing efficiency gains, and expectation of normal returns (precised).

In this submission we provide feedback on the:

- **Technical drafting of the revised draft IPP.** We recognise the Commission has accepted a number of our drafting points to the determination from June 2019, which has, in our view, improved the structure, clarity, readability and some policy matters of the IPP. Appendix 1 provides our mark-up of our feedback on the revised technical drafting. We highlight our main points below.
- **Draft section 53ZD information gathering notices.** We have previously stated our broad agreement of the use of a monitoring and investigation regime to provide information to build the Commission's confidence towards its RCP4 evaluation. However, we are concerned by the heavy administrative burden and regulatory impost from the proposed certifications, including the importation of a criminal standard for the provision of information, and the level of prescription about the information to be supplied.

## Technical drafting for the revised draft IPP

**Normalisation policy** (clause 20). We appreciate the development in the IPP of the normalisation policy. We note that our application to the Commission for it to determine whether a normalisation event has occurred (refer clause 20.3), currently no later than 105 working days, needs to be earlier to meet the timing for the annual compliance statement. We suggest 60 days.

**Performance measures** (clauses 11 – 19). We note and support the changes to the relative weighting of the incentive rates for our grid performance measures GP1 and GP2<sup>2</sup> (refer table 4.1). We also support that the non-revenue linked quality standards have been revised towards asset classes for which the Verifier has concluded we have a good level of asset health modelling maturity.<sup>3</sup>

**Schedules A - E.** In general, some of the references in the Schedules should be checked for accurate cross-referencing. For Schedules C2 and C4 the numbers in C2 should be in C4 and vice versa.

Lastly, we consider the omission of the three areas of costs estimation, customer consultation and asset health initiatives from the two regulatory instruments (Individual Price-Quality Path and Information Disclosure regulation) may make it difficult for interested parties to understand our regulation and information provision. We suggest the Commission will need to ensure that an interested party is readily able to get the complete picture.

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<sup>2</sup> GP1 = number of unplanned interruptions. GP2 = duration of unplanned interruptions.

<sup>3</sup> [Verifier's report](#) circuit breakers page 228 and power transformers refer page 124 table 29.

## Draft section 53ZD information gathering notices

Fundamentally, we consider the s53ZD regime for information relating to asset health, cost estimation, and stakeholder engagement to be inconsistent with the objectives of delivering long-term benefits to consumers in the electricity market.

If the proposed s53ZD notices are to achieve the Commission's goal of providing "confidence" in the evaluation process for RCP4,<sup>4</sup> then we consider that two main issues need to be resolved:

### **1. Permitting alternative approaches to ensure we can deliver meaningful information.**

Our review of the individual notices has considered whether the information gathered from us will be meaningful and meet the Commission's objective of giving confidence to its evaluation of our RCP4 proposal. Our conclusion is that the policy detail in the notices has not been sufficiently tested for implementation issues, including practicality and cost-effectiveness. The highly prescriptive nature of the notices, particularly the 'Asset health and risk modelling information' notice, creates a material risk of non-compliance, which, with the imposition of criminal sanctions, places the burden for the simple provision of information too high and would act contrary to the Part 4 objectives.

We have suggested redrafts for the clauses in each notice for extension, to be expanded to allow Transpower to apply for an exemption as well as an extension. This would be consistent with the approach for information to be disclosed under the revised draft IPP determination (clause 35). The approach will allow the notice requirements to be flexible if it transpires that certain information cannot reasonably be provided or there is better information to meet the Commission's purpose than specified in the notice.

Alternatively, each notice could provide that compliance is achieved on *best or reasonable endeavours* basis, to account for any practical limitations on our ability to provide the specified information in the specified time frames.

### **2. Certification.**

As already noted, we support the ability for the Commission to gather the information it considers necessary and desirable for operating Transpower's regulatory regime. However, we consider that the s53ZD notices should not create undue administrative burden or compliance risk for Transpower (and its directors and officers). We consider that director (or CEO) certification requirements are not appropriate for the information gathering notices under s53ZD.

We comment on the three notices below.

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<sup>4</sup> The Commission describes in each of the notices that the purpose for the information is "to give us confidence in the evaluation process for RCP4" (draft s53ZD clause 3 [asset health and risk modelling information](#)); "assist us in our cost estimation considerations for the regulatory control period following RCP3" (draft s53ZD clause 3 [cost estimation information](#)) and "improve our understanding of Transpower's customer engagement during RCP3 and give us confidence in the evaluation process for RCP4" (s53ZD clause 4 [customer consultation information](#)).

## s53ZD notice Asset health and risk modelling information

We support the Commission’s focus on asset health and agree with its expectation that “where asset health models are practical and useful, they should be developed and implemented” (L11 page 303 [reasons](#) paper).

However, the final decision for asset health and risk modelling information introduces material new and very detailed policy, which was not included in the Commission’s draft IPP determination. The short consultation window on the revised draft determination is our first and only opportunity to consider the detailed policy contained in the draft notice or provide our perspectives on whether the information requested will meet the Commission’s objective in practice. In short, we are concerned by the level of direction conveyed by the draft section 53ZD information gathering notice and have had limited opportunity to review and understand the operational implications.

Although the Verifier’s report indicated areas of development in the asset classes, some of which are identified in the notice,<sup>5</sup> we note the Verifier does not recommend specific development steps. Rather, it indicates its view of *potential scope* for improvement.<sup>6</sup> In our view, the draft s53ZD notice interposes the Commission’s own view of what it thinks we should be developing in a manner the Verifier did not.

The resulting prescriptive detail requires us to take a particular, pre-determined approach to developing asset health modelling. This at best limits (and may remove) our ability to take ownership for evaluating the possibilities and challenges to determine the approach that best takes account of GEIP, considers relevant precedent and learning over time and is framed by the underlying objective of long-term benefits to consumers.

Therefore, we do not support the information requirements as proposed. For the asset classes indicated by Schedule A 1.1 for development, our view is that all prescription on *how* to develop the modelling and provide update information should be removed.

If the prescription remains, then we propose alternative drafting (identified in Table 1 below and in the notice) to reduce the risk that the development is without precedent, inconsistent with GEIP and contrary to the long-term benefit of consumers.

Table 1 Draft s53ZD notice asset health and risk modelling information

S53ZD notice Schedule A reference	Comment
A1.1 the asset classes for which Transpower will further develop asset health models...	We suggest the prescription for each area (the detail after the colons) is removed. If prescription must remain then please adopt our proposed drafting outlined (below and in our mark up to the notice).

<sup>5</sup> schedule A1: HVDC and dynamic reactive support assets, static reactive support assets, secondary assets including protection and substation management systems)

<sup>6</sup> [Verifier report](#) “potential scope for improvement”: HVDC assets page 200; secondary assets including protection page 238; substations systems page 247.

<p>A 1.1.1 HVDC and dynamic reactive support assets</p>	<p>The HVDC system is made up of different components, many of which we can build models for by leveraging off similar assets on our HVAC grid, and what others are doing globally. With other, specialist HVDC assets due to the limited number of these assets around the world, we rely on manufacturer advice.</p> <p>Power stations predominately have models based on thermal cycles and or rotating plant, so we prefer reference to “similar facilities” instead.</p> <p>If the prescription remains, we propose re-drafting as follows</p> <p style="padding-left: 40px;">A1.1.1 <b>HVDC</b> and dynamic reactive support assets: <b>Transpower</b> to develop bespoke <b>HVDC</b> and dynamic reactive support asset health models on applicable systems that make up these assets, which are based on asset criticality and condition models typically used in similar facilities;</p>
<p>A1.1.3 Secondary assets – SA protection, battery systems and revenue meters</p>	<p>If the prescription remains, we propose re-drafting as follows:</p> <p style="padding-left: 40px;">A1.1.3 Secondary assets – SA Protection, Battery Systems and Revenue Meters: Transpower to continue to implement asset life-extension modelling by further development of asset-centric health and criticality models;</p>
<p>A1.1.4 secondary assets – SA substation management systems</p>	<p>Substation management systems (SMS) operate in a niche area where the realms of ICT and power systems engineering converge. These systems are the mission critical interface between Transpower’s primary and secondary assets and the IT control systems that operate the power system as a whole. SMS are subject to the evolving requirements of both realms and therefore controlling mortality rates is typically secondary to managing obsolescence drivers such as cyber security, functionality, compatibility, and supportability. Applying a simple asset health approach to SMS lifecycle management would result in a regime that increases whole of system costs and rapidly escalates risk.</p> <p>If prescription remains, we propose re-drafting as follows:</p> <p style="padding-left: 40px;">A1.1.4 Secondary assets – SA Substation Management Systems: Transpower will actively track the failure rates of SMS assets and will replace devices on an age-based approach, balanced against the context of the wider system requirements;</p>

A1.3 for each of the models and frameworks...the date at which Transpower expects each...to be able to be used to:	Clause A1.3 requires us to specify dates to achieve specific outcomes. Please remove specificity of 'date' and replace with the term 'timeframe' to ensure we can meet the information needs with more realistic assessments of timing.
A2, A3	<p>[A2] We have already submitted on the draft IPP in June (refer footnote 1) that any expert opinion should be in relation to our asset modelling and not asset management per se. The context against asset management is potentially large scope and a distraction from the task of understanding progress of our asset health initiatives journey.</p> <p>[A3] The expert must implicitly endorse the roadmap but its assessment against GEIP could raise the fact a development approach is not consistent with GEIP. The terms of reference (under clause 10) for the opinion should allow for a conclusion about departures from the road-map if doing so better meets GEIP.</p>
A4 Annual update	We understand that an annual update on progress could be useful to stakeholders. We propose that for our ownership of the update information, the form and content of the update should be at our discretion.

### s53ZD notice Customer consultation information

While the Commission signalled the information requirement for customer engagement in the 2017/18 Capex IM review, it was initially proposed as an Information Disclosure requirement.<sup>7</sup> We repeat our concerns that the importation of a criminal standard for the provision of information to the Commission that is, in part, dependent on the receipt of accurate and reliable information from the customers themselves is, we consider, inconsistent with the purpose of the Act.

The term **customer** is not defined; the proposed definition refers to the IPP which refers to the Transpower IM, which has no definition. The term **customer** should be defined as already used for Information Disclosure for consistent policy.<sup>8</sup>

We also note that the draft notice expands on IPP clause 25.1.5 CS1 (post-interruption reporting). For clarity, all interruption reporting should refer only to unplanned interruptions

### s53ZD notice Cost estimation information

We understand the intent of this draft notice is to build the Commission's confidence in our cost estimation. It seems likely we will need to develop a methodology for establishing the line of sight between proposal costs (where these can be established, noting that a base capex proposal is not simply a collection of specific projects) and delivery business case cost, and actual cost. Agreement on such methodology would be needed if the data collection and

<sup>7</sup> Refer [Capex IM review decisions](#) page 89

<sup>8</sup> **customer** means any generator, distribution business, consumer, or other entity in New Zealand that is connected, or applies to be connected, to the **grid**.

collation task is more complex than the drafting in the notice implies. We are keen to avoid a repeat of the recent assessment process for the IRIS baseline adjustment term (IBAT) where methodological differences created outcomes for Transpower and the Commission that were very different.

Finally, as this third regulatory period is the onramp towards the necessary low emissions future, our readiness for enabling connections and being able to deliver efficient service rests on the Commission getting the regulatory settings, incentives and development focus right.

We trust you find this submission helpful and we are available to respond to any queries you have on this submission.

Yours sincerely

A handwritten signature in blue ink, appearing to read 'David Knight', with a stylized flourish at the end.

David Knight  
**Acting Chief Executive**

## Attachments

1. Revised draft IPP mark up
2. s53ZD notice: Asset health and risk modelling
3. s53ZD Customer consultation
4. s53ZD Cost estimation



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

**[2019] NZCC [XX]**

**The Commission:** Sue Begg  
Dr Stephen Gale  
Elisabeth Welton  
John Crawford

**Date of decision:** [XX] 2019

Commerce Commission  
Wellington, New Zealand



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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;

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

5.1.3 the **grid output measures** in clause 11.

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

6. Applicable input methodologies

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

6.1.1 the **Transpower IM**; and

6.1.2 the **Capex IM**.

## Part 2: Defined terms

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

### A

<b>Act</b>	means the Commerce Act 1986;
<b>actual opex</b>	has the meaning given in the <b>Transpower IM</b> ;
<b>actual transmission revenue</b>	means the revenue received by <b>Transpower</b> in a <b>pricing year</b> for <b>electricity transmission services</b> ;
<b>AHI</b>	means <b>Transpower's</b> asset health assessment for the relative health of an asset in the range between 1 and 10, where an index of 1 denotes best condition and an index of 10 denotes worst condition;
<b>annual compliance statement</b>	means a written statement made by <b>Transpower</b> under clause 23 and associated information;

<b>asset health measure</b>	means the percentage of assets in an <b>asset health measure asset class</b> with an <b>AHI</b> of 8 or more;
<b>asset health measure asset class</b>	means an asset class that is subject to the asset health quality standards and is one of the following: <ul style="list-style-type: none"> <li>(a) power transformers;</li> <li>(b) outdoor circuit breakers;</li> </ul>
<b>asset performance measure</b>	has the meaning given in the <b>Capex IM</b> and, for the purposes of this determination: <ul style="list-style-type: none"> <li>(a) the <b>revenue-linked grid output measures</b> specified in clause 11.3; and</li> <li>(b) the non-revenue linked <b>grid output measures</b> described in clauses 25.1.2 to 25.1.4.</li> </ul>
<b>assurance auditor</b>	means a person who: <ul style="list-style-type: none"> <li>(a) is qualified for appointment as auditor of a company under the Companies Act 1993;</li> <li>(b) complies with Professional and Ethical Standard 1 (PES 1) issued by the New Zealand Auditing and Assurance Standards Board of the External Reporting Board in December 2018, under s 12(b) of the Financial Reporting Act 2013; and</li> <li>(c) for the avoidance of doubt: <ul style="list-style-type: none"> <li>(i) has no input into either <b>Transpower's</b> proposed updated <b>forecast MAR</b> and <b>forecast SMAR</b> calculations for a <b>pricing year of RCP3</b> or an <b>annual compliance statement</b> for a <b>disclosure year of RCP3</b> (other than in relation to <b>independent assurance reports</b>); and</li> <li>(ii) is not associated with or directed by any person who has provided any such input;</li> </ul> </li> </ul>

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**B**

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

**C**

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

**commodity instrument that is not an effective hedge** means an instrument acquired by or entered into by **Transpower** in accordance with its policy on **capital expenditure** hedging in respect of an exposure to commodity prices, and the instrument does not qualify for hedge accounting in accordance with **GAAP** at the date of being entered into or acquired and that results in a gain or loss being incorporated into its Statement of Comprehensive Income or equivalent audited statement of income and expenses for financial accounting purposes;

**contamination** means radioactive contamination, toxic contamination, dangerous biological contamination or chemical contamination;

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

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

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

**customer service measure** means a reporting measure for disclosure of the timeliness of communications and information provided to affected **customers** after an **interruption** event;

**Commented [A1]:** "Customer" is not defined in the Transpower IM (or Capex IM). We suggest the definition of "customer" in the Transpower Information Disclosure Determination 2014:

**customer** means any generator, distribution business, consumer, or other entity in New Zealand that is connected, or applies to be connected, to the **grid**;

## D

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

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

**disclosure year** has the meaning given in the **Transpower IM** and, in relation to a **pricing year**, is the year commencing 1 July immediately following the start of that **pricing year**;

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

<b>duration</b>	means the elapsed time of an <b>unplanned interruption</b> (in minutes, rounded to the nearest whole minute) from the start of that <b>unplanned interruption</b> until the earlier of: <ul style="list-style-type: none"> <li>(a) <b>restoration</b>; or</li> <li>(b) seven days after that <b>unplanned interruption</b> commenced;</li> </ul>
<b>E</b>	
<b>Electricity Authority</b>	has the meaning given in the <b>Transpower IM</b> ;
<b>electricity transmission services</b>	has the meaning given in the <b>Capex IM</b> ;
<b>electricity lines services</b>	has the meaning given in section 54C of the <b>Act</b> ;
<b>EV account</b>	has the meaning given in the <b>Transpower IM</b> ;
<b>EV account entry</b>	means, for a <b>disclosure year</b> , a memorandum entry to record for that <b>disclosure year</b> : <ul style="list-style-type: none"> <li>(a) an <b>ex-post economic gain or loss</b>;</li> <li>(b) an after-tax <b>gain or loss on capital expenditure commitments</b>;</li> <li>(c) an after-tax economic gain or loss calculated for a <b>base capex expenditure adjustment, grid output adjustment, or major capex expenditure and output adjustment</b>;</li> <li>(d) an after-tax economic gain or loss calculated for a <b>major capex sunk costs adjustment</b>;</li> <li>(e) an <b>ex-post economic gain or loss</b> calculated in accordance with clause 31.1.3(a); or</li> <li>(f) an after-tax gain or loss calculated in accordance with clauses 31.1.3(b) and 31.1.3(c);</li> </ul>



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

## F

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

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

**forecast FX rate** has the meaning given in the **Capex IM**;

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

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

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

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

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

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

**Commented [A2]:** Neither "Transpower's IPP" nor "IPP" is defined. We suggest referring to "the IPP" and adding this definition:

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

This comment also applies to the definitions of "forecast MAR" and "forecast SMAR" and clause 8.5.

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**G**

<b>GAAP</b>	has the meaning given in the <b>Transpower IM</b> ;
<b>gain or loss on capital expenditure commitments</b>	means a gain or loss required under <b>GAAP</b> to be recognised in profit or loss in <b>Transpower's</b> Statement of Comprehensive Income in respect of: <ul style="list-style-type: none"><li>(a) foreign currency <b>capital expenditure</b> commitments and associated designated hedges; and</li><li>(b) commodity hedge instruments;</li></ul>
<b>good electricity industry practice</b>	has the meaning given in Part 1 of the <b>code</b> ;
<b>grid</b>	has the meaning given in the <b>Capex IM</b> ;
<b>grid output</b>	has the meaning given in the <b>Capex IM</b> ;
<b>grid output adjustment</b>	has the meaning given in the <b>Capex IM</b> ;
<b>grid output incentive rate</b>	has the meaning given in the <b>Capex IM</b> and, for the purposes of this determination, the rates for <b>revenue-linked grid output measures</b> are specified in Tables 4.1 and 4.2;
<b>grid output measure</b>	has the meaning given in the <b>Capex IM</b> ;
<b>grid output target</b>	has the meaning given in the <b>Capex IM</b> and, for the purposes of this determination, the targets for <b>revenue-linked grid output measures</b> are specified in Tables 4.1 and 4.2;

**H**

<b>HVAC</b>	means high voltage alternating current;
<b>HVAC transmission revenue</b>	means revenue (net of rebates) received by <b>Transpower</b> from <b>customers</b> in respect of the use by <b>Transpower</b> of <b>Transpower's HVAC</b> transmission system for the purpose of providing <b>electricity transmission services</b> to <b>customers</b> ;
<b>HVDC</b>	means high voltage direct current;

<b>HVDC pole</b>	means an <b>HVDC</b> system circuit between Benmore and Haywards comprising the converter stations at Benmore and Haywards and the <b>HVDC</b> transmission circuit between them, carried on <b>HVDC</b> overhead line and undersea cable, connecting the converter stations;
<b>HVDC transmission revenue</b>	means revenue (net of rebates) received by <b>Transpower</b> from <b>customers</b> in respect of the use by <b>Transpower</b> of <b>Transpower's HVDC</b> transmission system for the purpose of providing <b>electricity transmission services</b> to <b>customers</b> ;
<b>IMs</b>	means the <b>Transpower IM</b> and the <b>Capex IM</b> taken together;
<b>ID determination</b>	has the meaning given in the <b>Transpower IM</b> ;
<b>Incremental rolling incentive scheme (or IRIS)</b>	means the incentive scheme specified in Part 3, subpart 6 of the <b>Transpower IM</b> ;
<b>independent assurance report</b>	means a report issued by an <b>assurance auditor</b> on an <b>annual compliance statement</b> in accordance with clause 34;
<b>instrument that ceases to be an effective hedge</b>	means a financial instrument entered into or acquired by <b>Transpower</b> in accordance with its policy on <b>capital expenditure</b> hedging that qualifies as an effective hedge at the date of entering into or acquiring the instrument, but that ceases during the <b>disclosure year</b> to qualify for hedge accounting in accordance with <b>GAAP</b> , and such ceasing to qualify results in a gain or loss being incorporated into its Statement of Comprehensive Income or equivalent audited statement of income and expenses for financial accounting purposes;
<b>interruption</b>	means the cessation of conveyance of electricity between <b>grid</b> assets owned by <b>Transpower</b> to the assets owned or operated by a <b>customer</b> at a <b>point of service</b> to the <b>grid</b> ;

**Commented [A3]:** It would be more accurate if this read:  
 ...between **grid** assets owned by **Transpower** and the assets...

13

**IPP revenue growth rate** means the maximum allowable annual percentage growth in **forecast SMAR** for each **pricing year** as set out in clause 8.4;

**L**

**large buildup in EV account balance** has the meaning given in clause 3.7.3A of the **Transpower IM**;

**listed project** has the meaning given in the **Capex IM**;

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

**low incentive rate base capex allowance** has the meaning given in the **Capex IM**;

**M**

**major capex** has the meaning given in the **Capex IM**;

**major capex expenditure and output adjustment** has the meaning given in the **Capex IM**;

**major capex incentive rate** has the meaning given in the **Capex IM**;

**major capex project** has the meaning given in the **Capex IM**;

**major capex proposal** has the meaning given in the **Capex IM**;

**major capex sunk costs adjustment** has the meaning given in the **Capex IM**;

**measure of grid performance** has the meaning given in the **Capex IM** and, for the purposes of this determination, the measures for **revenue-linked grid output measures** are specified in clause 11;

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

14

**N**

**natural disaster**

means an event caused by forces beyond human control, including without limitation:

- (a) earthquakes;
- (b) landslips;
- (c) floods;
- (d) severe weather events, including storms, wind and rain;
- (e) tsunamis; and
- (f) volcanic and hydrothermal activity;

**Commented [A4]:** For consistency with the equivalent AER regulation this should expressly include lightning, particularly as lightning is the highest risk weather event to Transpower's assets.

**new investment contract**

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

**normalisation event**

has the meaning specified in clause 20.2;

**O**

**opening RAB value**

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

**operating cost**

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

**operating expenditure**

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

**opex allowance**

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

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

**opex incentive amount**

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

**other regulated income**

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

<b>outage</b>	<p>has the meaning set out in clause 12.130 of the <b>code</b>, as amended from time to time, other than as specified in <b>code</b> sub clauses 12.130(2)(c) and 12.130(2)(d), and excludes those that are:</p> <ul style="list-style-type: none"> <li>(a) of less than one minute in duration;</li> <li>(b) at the request of, or caused by, a <b>customer</b>; and</li> <li>(c) due to correct operation of <b>Transpower's</b> assets, caused by events in a <b>customer's</b> assets;</li> </ul>
<b>P</b>	
<b>pass-through costs</b>	has the meaning given in the <b>Transpower IM</b> ;
<b>point of service</b>	has the meaning set out in Part 1, clause 1.1(1) of the <b>code</b> ;
<b>point of service sub-category</b>	<p>means a group of <b>points of service</b> 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> <ul style="list-style-type: none"> <li>(a) in relation to <b>measure of grid performance GP1</b>: <ul style="list-style-type: none"> <li>(i) GP1A: "N-1 security high economic consequence";</li> <li>(ii) GP1B: "N-1 security material economic consequence";</li> <li>(iii) GP1C: "N security high economic consequence";</li> <li>(iv) GP1D: "N security material economic consequence";</li> <li>(v) GP1E: "N-1 security generator"; and</li> <li>(vi) GP1F: "N security generator";</li> </ul> </li> </ul>

- (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”;

<b>pricing compliance statement</b>	means a written statement made by <b>Transpower</b> under clause 22;
<b>Pole 2</b>	means one of <b>Transpower’s HVDC poles</b> ;
<b>Pole 3</b>	means one of <b>Transpower’s HVDC poles</b> ;
<b>pricing year</b>	has the meaning given in the <b>Transpower IM</b> ;
<b>programme</b>	has the meaning given in the <b>Capex IM</b> ;
<b>project</b>	has the meaning given in the <b>Capex IM</b> ;
<b>Project k</b>	means the <b>Pole 2</b> life-extension project planned by <b>Transpower</b> in <b>RCP3</b> ;
<b>publicly disclose (or public disclosure)</b>	means to make available to the public on <b>Transpower’s</b> website and to notify the <b>Commission</b> that it has been made available;

**R**

<b>RCP2</b>	means the <b>regulatory period</b> prior to <b>RCP3</b> , being the period from 1 April 2015 to 31 March 2020, provided that references to the final <b>disclosure year</b> in <b>RCP2</b> means the <b>disclosure year</b> ending on 30 June 2020;
<b>RCP3</b>	means the <b>regulatory period</b> from 1 April 2020 to 31 March 2025, provided that references to the final <b>disclosure year</b> in <b>RCP3</b> means the <b>disclosure year</b> ending on 30 June 2025;
<b>recoverable cost</b>	has the meaning given in the <b>Transpower IM</b> ;
<b>regulatory period</b>	means a period determined by the <b>Commission</b> under the <b>Act</b> , during which a particular individual price-quality path determination applies to <b>Transpower</b> , including but not limited to <b>RCP2</b> or <b>RCP3</b> ;
<b>regulatory tax allowance</b>	means the tax allowance determined in accordance with clause 3.4.1 of the <b>Transpower IM</b> ;
<b>related party</b>	has the meaning given in the <b>Transpower IM</b> ;
<b>relevant pricing year</b>	in relation to a <b>disclosure year</b> , means the <b>pricing year</b> commencing on 1 April immediately before the start of that <b>disclosure year</b> ;



**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**;

19

**T**

<b>tax rules</b>	has the meaning given in the <b>Transpower IM</b> ;
<b>term credit spread differential allowance</b>	has the meaning given in the <b>Transpower IM</b> ;
<b>third party</b>	means not a <b>related party</b> and excludes, for the avoidance of doubt, an employee or party contracted by <b>Transpower</b> to provide <b>electricity lines services</b> ;
<b>TPM</b>	has the meaning given in the <b>Transpower IM</b> ;
<b>Transpower</b>	has the meaning given in the <b>Act</b> ;
<b>Transpower IM</b>	means the <i>Transpower Input Methodologies Determination</i> [2012] NZCC 17, including, for the avoidance of doubt, any amendment applicable to <b>RCP3</b> ;

**U**

<b>unplanned interruption</b>	<p>means any <b>interruption</b> 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 <b>customers</b> affected by the <b>interruption</b> and excludes:</p> <ul style="list-style-type: none"><li>(a) any unplanned interruptions originating on another party's system and where the <b>Transpower grid</b> operated correctly;</li><li>(b) any unplanned <b>interruptions</b> to the auxiliary load used by electricity generator assets; and</li></ul>
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- (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
  - 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**;

**work stoppage** means a temporary cessation of work as a form of protest, including without limitation a strike or lockout; and

**works under construction** has the meaning given in the **Transpower IM**.

### Part 3: Price path

#### 8. Maximum revenues

- 8.1 The maximum revenue that **Transpower** may recover for **electricity transmission services** for each **pricing year** is the **forecast SMAR** for that **pricing year**.
- 8.2 The forecast revenue for **electricity transmission services**, including **pass-through costs** and **recoverable costs** passed on to any **customer**, that **Transpower** uses for setting transmission charges under the **TPM** for the **pricing year** must not exceed the **forecast SMAR**.
- 8.3 For the purpose of clause 8.1, an update of the 'forecast SMAR' is calculated by –
- 8.3.1 inputting building block values for each **disclosure year** of the **regulatory period** into Schedule D;
  - 8.3.2 converting the **forecast MAR** building blocks to **pricing year** values by applying the cash flow timing factors in 'Column 4' of Schedule D; and
  - 8.3.3 converting the **forecast MAR** to the **forecast SMAR** for each **pricing year** using the methodology set out in clause 3.1.1(3)(b)-(d) of the **Transpower IM**.
- 8.4 The **IPP revenue growth rate** for each **pricing year** of **RCP3** is [1.0%].
- 8.5 Where **Transpower** applies to the **Commission** to reconsider **Transpower's IPP** for the purposes of clauses 3.7.4(1) or 3.7.4(4) of the **Transpower IM**, **Transpower** must:
- 8.5.1 provide to the **Commission** no later than 80 **working days** after the end of the prior complete **disclosure year**, a proposed updated **forecast MAR** and proposed updated **forecast SMAR** for each of the remaining complete **pricing years** of **RCP3** in accordance with clause 30; and
  - 8.5.2 **publicly disclose** that proposed updated **forecast MAR** and **forecast SMAR** and, where applicable, the **forecast EV adjustment** amounts in accordance with clause 32.2.
- 8.6 For the purposes of clause 8.5, **Transpower** must apply the calculations required in clause 30 and Schedule D, and must include supporting information for its calculations.

#### 9. Wash-up calculation

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

**Commented [A5]:** Clause 8.1 does not deal with updates to the forecast SMAR. Forecast SMAR updates are dealt with in clause 30 so this clause is unnecessary and should be removed.

**Commented [A6]:** An adjustment under clause 3.7.4(4) of the Transpower IM does not require an application by Transpower. Clause 3.7.4(4) just says the Commission will reconsider the IPP to take account of capex and the EV adjustment. Accordingly, this clause should be as follows:

8.5 This clause applies:

8.5.1 if **Transpower** wishes to apply to the **Commission** for a reconsideration of the **IPP** under clause 3.7.4(1) of the **Transpower IM**; and

8.5.2 for the purpose of the **Commission** reconsidering the **IPP** under clause 3.7.4(4) of the **Transpower IM**.

**Transpower** must:

8.5.3 [current clause 8.5.1]; and

8.5.4 current clause 8.5.2].

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**11. Revenue-linked performance measures

- 11.1 Subject to clause 20, for the purposes of calculating the **grid output adjustment** under clause 19 and the measures specified in Table 4.1 and Table 4.2, the **revenue-linked grid output measures** are:

11.1.1 **measures of grid performance** specified in clause 11.2; and

11.1.2 **asset performance measures** specified in clause 11.3;

- 11.2 The **measures of grid performance** are:

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

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

- 11.3 The **asset performance measures** are:

11.3.1 AP1, which measures **HVDC energy availability of Pole 2 and Pole 3** as a percentage of annual capacity during a **disclosure year**, as set out in Table 4.2 and as described in clauses 17.1 to 17.3. and

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

12. Quality standards for revenue-linked grid output measures

- 12.1 The **point of service sub-category** limits for each **point of service sub-category** of **measures of grid performance** GP1 and GP2 are identified in Table 4.1.

- 12.2 The quality standards for **asset performance measures** AP1 and AP2 are identified in Table 4.2.

13. Requirement to calculate GP1 assessed values for first disclosure year of RCP3

- 13.1 For the **disclosure year** from 1 July 2020 to 30 June 2021, **Transpower** must calculate assessed values for each **measure of grid performance** GP1 **point of service sub-category** in Table 4.1 in accordance with clauses 14.6 to 14.11.

**Commented [A7]:** These words should be deleted because Table 4.2 contains the metrics rather than a description of what is being measured.

This comment also applies to clause 11.3.2.

**Commented [A8R7]:** CB: Personally I don't agree with this comment and would remove it. It's not "die in a ditch" material.

**Commented [A9]:** Clause 17.4 (relating to Project k) should be cross-referenced here.

**Commented [A10]:** There is still no clear statement that there are quality standards linked to GP1 and GP2 (contrast clause 12.1 and 12.2). This may be able to be inferred from the heading, however in our view inferring this from a heading is not sufficient. Also, Table 4.1 does not identify any quality standards.

We suggest this redraft of clause 12:

12. Quality standards for revenue-linked grid output measures

12.1 The quality standards for **measure of grid performance** GP1 are specified in clause 14. For the avoidance of doubt, there is no GP1 quality standard for the **disclosure year** from 1 July 2020 to 30 June 2021.

12.2 The quality standards for **measure of grid performance** GP2 are specified in clause 16. For the avoidance of doubt, there is no GP2 quality standard for the **disclosure year** from 1 July 2020 to 30 June 2021.

12.3 The quality standards for **asset performance measure** AP1 are specified in clause 17.2.

12.4 The quality standards for **asset performance measure** AP2 are specified in clause 18.2.

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

14.5 For the purposes of clauses 14.1 to 14.4, to comply with the **measure of grid performance** GP1 assessment, **Transpower's** assessed value for four or more of the **point of service sub-categories** for the **disclosure year** must not exceed the **point of service sub-category** limit specified for the **disclosure year** for each of those **measure of grid performance GP1 point of service sub-categories** in Table 4.1.

14.6 Subject to clause 20, for the purposes of clause 13 and 14.5, **Transpower's** assessed value for **point of service sub-category** GP1A for a **disclosure year** is calculated in accordance with the formula:

GP1A assessed value = the sum of **unplanned interruptions** for the **point of service sub-category** GP1A commencing within the **disclosure year**.

14.7 Subject to clause 20, for the purposes of clauses 13 and 14.5, **Transpower's** assessed value for **point of service sub-category** GP1B for a **disclosure year** is calculated in accordance with the formula:

GP1B assessed value = the sum of **unplanned interruptions** for the **point of service sub-category** GP1B commencing within the **disclosure year**.

14.8 Subject to clause 20, for the purposes of clause 13 and 14.5, **Transpower's** assessed value for **point of service sub-category** GP1C for a **disclosure year** is calculated in accordance with the formula:

GP1C assessed value = the sum of **unplanned interruptions** for the **point of service sub-category** GP1C commencing within the **disclosure year**.

14.9 Subject to clause 20, for the purposes of clause 13 and 14.5, **Transpower's** assessed value for **point of service sub-category** GP1D for a **disclosure year** is calculated in accordance with the formula:

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

14.10 Subject to clause 20, for the purposes of clause 13 and 14.5, **Transpower's** assessed value for **point of service sub-category** GP1E for a **disclosure year** is calculated in accordance with the formula:

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

14.11 Subject to clause 20, for the purposes of clause 12.2 and 14.5, **Transpower's** assessed value for **point of service sub-category** GP1F for a **disclosure year** is calculated in accordance with the formula:

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

**Commented [A11]:** For consistency with clauses 14.1.2 and 14.2.2(b), this clause should include at the end:

..., as calculated in accordance with clauses 14.6 to 14.11.

**Commented [A12]:** It is not necessary to include any cross-references (other than to clause 20) because clause 14.6 is referred to above where it is relevant.

This comment also applies to clauses 14.7 to 14.11.

**Commented [A13]:** This cross-reference should be to clause 13.

15. Requirement to calculate GP2 assessed values for first disclosure year of RCP3
- 15.1 For the **disclosure year** from 1 July 2020 to 30 June 2021, **Transpower** must calculate assessed values for each **measure of grid performance GP2 point of service sub-category** in Table 4.1 in accordance with clauses 16.6 to 16.11.
16. GP2 quality standard for remaining disclosure years of RCP3
- 16.1 To comply with the GP2 quality standard for the **disclosure year** from 1 July 2021 to 30 June 2022, **Transpower** must either:
- 16.1.1 comply with the **measure of grid performance** GP2 assessment specified in clause 16.5; or
- 16.1.2 have assessed values for four or more of the GP2 **point of service 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 GP2 point of service sub-categories** in Table 4.1, as calculated in accordance with clauses 16.6 to 16.11.
- 16.2 To comply with the GP2 quality standard for the **disclosure year** from 1 July 2022 to 30 June 2023, **Transpower** must either:
- 16.2.1 comply with the **measure of grid performance** GP2 assessment specified in clause 16.5; or
- 16.2.2 have:
- (a) complied with the **measure of grid performance** GP2 assessment specified in clause 16.5 for the **disclosure year** from 1 July 2021 to 30 June 2022; and
- (b) assessed values for four or more of the GP2 **point of service 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 **measures of grid performance GP2 point of service sub-categories** in Table 4.1, as calculated in accordance with clauses 16.6 to 16.11.
- 16.3 To comply with the GP2 quality standard for the **disclosure year** from 1 July 2023 to 30 June 2024, **Transpower** must either:
- 16.3.1 comply with the **measure of grid performance** GP2 assessment specified in clause 16.5; or
- 16.3.2 have complied with the **measure of grid performance** GP2 assessment specified in clause 16.5 in each of the two preceding **disclosure years** of **RCP3**.



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

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

16.4.2 have complied with the **measure of grid performance** GP2 assessment specified in clause 16.5 in each of the two preceding **disclosure years** of **RCP3**.

16.5 For the purposes of clause 16.1 to 16.4, to comply with the **measure of grid performance** GP2 assessment, **Transpower's** assessed value for four or more of the **point of service sub-categories** for the **disclosure year** must not exceed the **point of service sub-category** limit specified for each of those **measure of grid performance** GP2 **point of service sub-categories** in Table 4.1.

16.6 Subject to clause 20, for the purposes of clauses 15 and 16.5, **Transpower's** assessed value for **point of service sub-category** GP2A for a **disclosure year** is calculated in accordance with the formula:

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

16.7 Subject to clause 20, for the purposes of clauses 15 and 16.5, **Transpower's** assessed value for **point of service sub-category** GP2B for a **disclosure year** is calculated in accordance with the formula:

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

16.8 Subject to clause 20, for the purposes of clauses 15 and 16.5, **Transpower's** assessed value for **point of service sub-category** GP2C for a **disclosure year** is calculated in accordance with the formula:

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

16.9 Subject to clause 20, for the purposes of clauses 15 and 16.5, **Transpower's** assessed value for **point of service sub-category** GP2D for a **disclosure year** is calculated in accordance with the formula:

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

**Commented [A14]:** For consistency with clauses 16.1.2 and 16.2.2(b), this clause should include at the end:

..., as calculated in accordance with clauses 16.6 to 16.11.

**Commented [A15]:** It is not necessary to include any cross-references (other than to clause 20) because clause 16.6 is referred to above where it is relevant.

This comment also applies to clauses 16.7 to 16.11.

- 16.10 Subject to clause 20, for the purposes of clauses 15 and 16.5, **Transpower's** assessed value for **point of service sub-category** GP2E for a **disclosure year** is calculated in accordance with the formula:

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

- 16.11 Subject to clause 20, for the purposes of clauses 15 and 16.5, **Transpower's** assessed value for **point of service sub-category** GP2F for a **disclosure year** is calculated in accordance with the formula:

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

17. AP1 quality standard for each disclosure year of RCP3

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

- 17.2 For the purpose of clause 17.1, to comply with the **asset performance measure** AP1 **quality standard**, the **HVDC** energy availability for **Pole 2** and **Pole 3** for the **disclosure year** as calculated in accordance with clause 17.3 must be higher than the AP1 quality standard value in Table 4.2.

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

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

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**

**Commented [A16]:** This clause is redundant because the binding nature of quality standards is a consequence of the Commerce Act. This determination only needs to say what the quality standards are. There is no equivalent of this clause for the GP1 or GP2 quality standards.

This comment also applies to clause 18.1 and 21.1.

**Commented [A17]:** This should say:

...quality standard for each disclosure year,...

This comment also applies to clause 18.2.

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

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

where:

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

18. AP2 quality standard for each disclosure year of RCP3

- 18.1 For each **disclosure year**, Transpower must comply with the **asset performance measure** AP2 quality standard as specified in clause 18.2.
- 18.2 For the purpose of clause 18.1, to comply with the **asset performance measure** AP2 quality standard, the percentage of the time that the **HVAC** assets listed in Schedule G are available during the **disclosure year**, as calculated in accordance with clause 18.3, must be higher than the AP2 quality standard value in Table 4.2.
- 18.3 For the purposes of clause 18.2, subject to clause 20, the percentage of the time that the **HVAC** assets are available during the **disclosure year** is calculated as a percentage term in accordance with the formula:

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

**Commented [A18]:** In the formula "HVAC circuits" should be "HVAC assets".

This comment also applies to the formula in clause 19.3.4.

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

Point of service sub-category	Cap	Grid output target	Collar	Point of service sub-category limit	Grid output Incentive rate
<b>GP1: number of interruptions (per annum)</b>					\$ per interruption
GP1A: N-1 security high economic consequence	0	7	14	14	335,714
GP1B: N-1 security material economic consequence	7	24	41	41	40,294
GP1C: N security high economic consequence	4	6	8	8	250,000
GP1D: N security material economic consequence	9	23	37	37	41,786
GP1E: N-1 security generator	5	9	13	13	62,500
GP1F: N security generator	6	12	18	18	41,667
<b>GP2: average duration of interruption (min)</b>					\$ per minute
GP2A: N-1 security high economic consequence	30	92	154	154	37,903
GP2B: N-1 security material economic consequence	36	61	86	86	27,400
GP2C: N security high economic consequence	0	103	206	206	4,854
GP2D: N security material economic consequence	0	140	280	280	4,179
GP2E: N-1 security generator	50	174	298	298	2,016
GP2F: N security generator	11	93	175	175	3,049

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

Asset performance measure	Cap	Grid output target	Collar	Quality standard	Grid output Incentive rate
<b>AP1: HVDC availability (%)</b>					\$ per 1%
HVDC availability	99.75	98.75	97.75	96.75	500,000
<b>AP2: HVAC availability (%)</b>					\$ per 1%
HVAC availability (71 selected assets)	99.2	99.0	98.8	98.6	5,000,000

19. The grid output adjustment

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

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

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

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

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

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

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

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

**Commented [A19]:** Clauses 19.3.1 and 19.3.2 should be expressly subject to clause 20 (normalisation) as clauses 19.3.3 and 19.3.4 already are.

**Commented [A20]:** This cross-reference should be to clause 19.4.

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

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

19.4 For the purposes of clause 19.3.3, subject to clause 20, for a maximum of 3 **disclosure years of RCP3** during the life of **Project k**, the **Project k** adjustment may be added to the HVDC energy availability for **Pole 2** and **Pole 3** calculated in accordance with clause 19.3.3, where the **Project k** adjustment for each **disclosure year** is calculated in accordance with the formula:

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

where:

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

**Commented [A21]:** This should be in bold and the "K" lower case.

**Commented [A22]:** This should be "lesser".

## 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.

**Commented [A23]:** Clause 20 also applies to the calculations of measures of grid performance under clauses 19.3.1 and 19.3.2, so cross-references to those clauses need to be added.

This comment also applies to clauses 20.3.4 and 20.4.1(c).

**Commented [A24]:** Given how "normalisation event" is defined (i.e. being a type of interruption or outage) these words should be:

...that the **interruption or outage** is a **normalisation event**.

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**.

**Commented [A25]:** This would be better as:

a "terrorist act" as defined in the Terrorism Suppression Act 2002;

- 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

**Commented [A26]:** Confirmation of a normalisation event should happen before the annual compliance statement for the disclosure year is submitted, as the statement is required to include normalisation event information under clause 24.1.11 (including the grid output adjustment calculation). Accordingly, this deadline should be sooner than the deadline for the statement (which is also 105 working days). We suggest 60 working days, which we believe will give the Commission enough time to make its determination under clause 20.4.

See also our comment on clause 20.4

**Commented [A27]:** Given the nature of events in 20.2.4, we do not consider it will always be possible to exercise good electricity industry practice in relation to those causes (e.g. terrorism, war, civil commotion). We suggest adding this to the end of this clause:

...to the extent **good electricity industry practice** can be applied to the cause and effects;

**Commented [A28]:** It would be helpful to have a specified time period in which the Commission must make its decision on a normalisation event so we can be assured we will have enough time to factor the decision into the annual compliance statement and grid output adjustment calculation for the relevant disclosure year.



20.4.2 publicly disclose that the normalisation event has been excluded from those calculations.

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

21.1 For each disclosure year, Transpower must comply with the asset health measure AH quality standard, which measures the percentage of assets with AHI of 8 or greater for each asset health measure asset class described in clauses 21.3 to 21.4 and Table 4.3.

21.2 For the purposes of clause 21.1, to comply with the asset health quality standard, Transpower’s assessed value for each asset health measure asset class must not be higher than the quality standard specified for that asset health measure asset class in Table 4.3.

21.3 For the purposes of clause 21.2, Transpower’s assessed value for the power transformers asset health measure asset class for each disclosure year is calculated in accordance with the formula:

Power transformers assessed value =

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

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 (%)
Power transformers	3.22	3.68	5.37	8.65	12.03
Outdoor circuit breakers	2.00	2.37	5.65	7.63	8.27

**Part 5: Compliance and information reporting**

22. Pricing compliance statement

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

**Commented [A29]:** These words are redundant as “asset health measure asset class” is a defined term.

For consistency with the alternative version of clause 12 we have suggested above, we suggest clause 21.1 be as follows:

21.1 The quality standards for asset health measure AH are specified in clause 21.2-21.4.

**Commented [A30]:** This clause should be amended as follows:

21.2 To comply with the AH quality standard for each disclosure year asset-health quality standard, Transpower’s assessed value for each asset health measure asset class for the disclosure year must not be higher than the quality standard specified for that asset health measure asset class in Table 4.3.

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

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

22.2 The **pricing compliance statement** must:

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

22.2.2 include any information reasonably necessary to demonstrate whether **Transpower** has complied with the price path in Part 3 for the **pricing year**, including but not limited to a summary of forecast total revenues applied in the **TPM** for the **pricing year**;

22.2.3 if **Transpower** has not complied with the price path in Part 3 for the **pricing year**, disclose:

(a) each requirement in Part 3 that is not complied with; and

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

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

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

23. Annual compliance statement

23.1 Subject to clause 27, no later than 105 **working days** after the end of each **disclosure year**, **Transpower** must:

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

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

23.2 The **annual compliance statement** must:

23.2.1 state whether or not **Transpower** has:

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

(b) complied with the requirement to publicly disclose, in accordance with the **ID determination**, its annual **grid output adjustment** calculation for the **disclosure year**, including the values for '*m*' calculated in accordance with Schedule B, clause B2(1) of the **Capex IM**;

- (c) complied with requirements related to **grid output adjustment** calculations and **public disclosure**; and
  - (d) complied with requirements related to wash-up calculations and **public disclosure**;
- 23.2.2 provide the information reasonably necessary to demonstrate compliance with the quality standards in clauses 14.1-14.4, 16.1-16.4, 17.1, 18.1 and 21.1;
- 23.2.3 if **Transpower** has not complied with any quality standards in clauses 14.1-14.4, 16.1-16.4, 17.1, 18.1 and 21.1, disclose:
- (a) each **requirement and** quality standard that is not complied with; and
  - (b) the reasons for non-compliance in each case;
- 23.2.4 **include information on performance against the following performance measures:**
- (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 **asset performance measure AP1**: **Transpower's HVDC** energy availability for the **Pole 2** and **Pole 3** for the **disclosure year**, and the quality standard for the **disclosure year**;
  - (f) for **asset performance measure AP1**: the **cap, collar** and **grid output** target for the **disclosure year**;
  - (g) for **asset performance measure AP2**: the percentage of the time that **Transpower's HVAC** assets listed in Schedule G are available during the **disclosure year**, and the quality standard for the **disclosure year**;
  - (h) for **asset performance measure AP2**: the **cap, collar** and **grid output** target for the **disclosure year**;
  - (i) for **asset health measure AH**: the assessed value and the quality standard for each **asset health measure asset class** for the **disclosure year**;

**Commented [A31]:** These words are redundant as this clause is only concerned with quality standards.

**Commented [A32]:** The drafting of this clause is awkward because it is not always clear what is being reported "against" what. Also, there is no need for Transpower to report caps, collars, targets and quality standards themselves because those are written in the IPP.

We suggest this alternative drafting:

**23.3.4 include the following performance information.**

(a) for **measures of grid performance GP1** and **GP2**: assessed values for the **disclosure year** against the caps, targets and collars in Table 4.1 and the relevant quality standard in clause 14 or 16;

(b) for **asset performance measures AP1** and **AP2**: assessed values for the **disclosure year** against the caps, targets and collars in Table 4.2 and the relevant quality standard in clause 17.2 or 18.2; and

(c) for **asset health measure AH**: assessed values for the **disclosure year** against the relevant quality standard in clause 21.2.

- 23.2.5 state the date on which the **annual compliance statement** was prepared;
- 23.2.6 include a certificate in the form set out in Schedule K, signed by at least two **directors of Transpower**; and
- 23.2.7 be accompanied by an **independent assurance report** procured and prepared in accordance with clause 34.

24. Annual compliance statement – information required

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

- 24.1.1 the **ex-post economic gain or loss** for the **disclosure year**, calculated in accordance with clause 29.1 and Schedule E, including any supporting information;
- 24.1.2 the forecast revenue for **electricity transmission services**, including **pass-through costs** and **recoverable costs** passed on to any customer, that **Transpower** used for setting charges under the **TPM** for the **relevant pricing year**;
- 24.1.3 the **HVAC transmission revenue** for the **relevant pricing year**;
- 24.1.4 the **HVDC transmission revenue** for the **relevant pricing year**;
- 24.1.5 a description and explanation of any voluntary revenue reduction **Transpower** has made in calculating the **ex-post economic gain or loss** for the **disclosure year**;
- 24.1.6 an updated summary of the **EV account** as set out in Schedule B and an updated forecast **EV account** balance at the end of **RCP3**, where these are supported by the further information required in clause 31.1, and where the **EV account entries** are calculated in accordance with clause 31.2;
- 24.1.7 a summary of **pass-through costs and recoverable costs** as set out in Schedule H, including:
  - (a) a description and explanation of any **operating costs** incurred as part of a **major capex project**; and
  - (b) a summary of any prudent net additional **operating costs** incurred in responding to a **catastrophic event**;
- 24.1.8 an explanation for the difference between the **forecast opex** and **actual opex**, including in each forecast and actual **total the operating lease payments** otherwise capitalised in accordance with the **Transpower IM**, and that are applied in the calculation of the **opex incentive amount** for that **disclosure year**;
- 24.1.9 updated summaries of the approved **base capex** as set out in Schedules C1 to C4;

**Commented [A33]:** This information appears to be duplication of the information required under clauses 24.1.3 and 24.1.4.

**Commented [A34]:** These costs should be specified to be "for the disclosure year".

**Commented [A35]:** It is unclear why these particular examples are called out.

**Commented [A36]:** There is an "of" missing here.

**Commented [A37]:** These words should be deleted. The only values that contribute to the opex incentive amount "for that disclosure year" (i.e. in RCP3) are values for disclosure years in **RCP2**.

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

24.1.11 where a **normalisation event** is excluded from the calculation of assessed values of **revenue-linked grid output measures** in accordance with clause 20.4 for a **disclosure year**, a description of the adjustment to the **EV account** to reflect the effect on the **grid output adjustment** for that **disclosure year**.

25. Information to accompany the annual compliance statement

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

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

25.1.2 for **asset performance measure** AP3, which measures the extent to which **Transpower** meets estimated return to service times for planned **outages** of the **HVAC** assets set out in Schedule G: identify those assets in Schedule G that are returned to service two or more hours after **Transpower's** estimated return to service time, including:

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

25.1.3 for **asset performance measure** AP4, which measures the extent to which **Transpower** communicates delays to affected parties of planned **outage** return to service times of the **HVAC** assets set out in Schedule G – for assets in Schedule G: the percentage of time that **Transpower** gives 1.5 hours or more notice to the market in the event assets are going to be returned to service later than the **original** planned return to service time;

25.1.4 for **asset performance measure** AP5, which measures the extent that **Transpower** has placed **customers** on a reduced level of supply security, with that reduced level being N-security of supply: the extent that **Transpower** has placed **customers** on N-security of supply, including:

- (a) when this has occurred;
- (b) how much notice **Transpower** provided to **customers** before it occurred;
- (c) how long **customers** were reduced to N-security of supply; and
- (d) the **points of service** affected by the reduced N-security of supply;

**Commented [A38]:** This partially duplicates clauses 28.5 and 28.6.

We are unclear why Transpower has to explain why its performance was better than the cap.

**Commented [A39]:** This should be deleted. Transpower is unlikely to know what the impact on affected parties or the market of the late return to service was.

**Commented [A40]:** These words are redundant.

**Commented [A41]:** This should not be the original estimated return to service time as this clause should capture extended estimated return to service times too.

We note the inconsistency in language between this clause and clause 35.1.2 (e.g. "planned" versus "estimated").

**Commented [A42]:** Some customers are on N-security by design. This should be:

...a reduced level of supply security **due to an outage**...

**Commented [A43]:** References in the subclauses to "customers" should be "the customers" so it is clear Transpower does not have to notify any of its customers that are not affected by the outage.

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**.

**Commented [A44]:** CS1 is not about timeliness of communication. It is about the results of the post-event surveys.

**Commented [A45]:** CS1 should only apply to unplanned interruptions. Planned interruptions will be subject to Transpower's normal outage planning process, which will include providing up-front information about the timing of and reasons for the interruption.

We note that this information is duplicated in the proposed 532D notice for customer consultation information (clause 2.5 of the notice). We also note that clause A6 of the notice restricts the information to information about unplanned interruptions.

## 26. Periodic reporting for performance events

26.1 Subject to clause 27, for each **unplanned interruption** during a **disclosure year** which lasts 12 hours or more, **Transpower** must **publicly disclose** within 42 **working days** of the **unplanned interruption**:

26.1.1 the cause of the **unplanned interruption**;

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

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

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

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

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

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

26.2 Subject to clause 27, for each **interruption** during a **disclosure year** over one system minute, **Transpower** must **publicly disclose** within 42 **working days** of the **interruption**:

**Commented [A46]:** In contrast to clause 26.1 (which is identical but for the duration of the interruption), this clause captures planned as well as unplanned interruptions. We do not believe that is intended. Planned interruptions will be subject to Transpower's normal outage planning process, which will include providing up-front information about the timing of and reasons for the interruption.

The references to "interruption" in this clause should be changed to "unplanned interruption".

26.2.1 the cause of the **interruption**;

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

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

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

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

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

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

## 27. Extension of reporting time limits

27.1 For the purposes of clauses 23.1, 26, **Transpower** may apply to the **Commission** to extend the time limit set out in those clauses if –

**Commented [A47]:** There is an "and" missing here.

27.1.1 **Transpower** considers that an extension is reasonably justified having regard to the circumstances; and

This clause should also apply to clause 22.1 (time limit for the pricing compliance statement).

27.1.2 the application for extension is made to the Commission no later than 15 **working days** before the time limit set out in those clauses is due to expire.

27.2 For the purposes of clause 27.1:

27.2.1 any extension given by the **Commission** shall be effected by giving or posting notice of the extension to **Transpower**;

27.2.2 the notice effecting the extension must specify the period of the extension and the reasons for the extension; and

27.2.3 the notice will be published by the **Commission**.

28. Annual reporting for performance events

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

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

28.3 **Transpower** must **publicly disclose** at the same time as its **annual compliance statement**, for **measure of grid performance GP-M**, which measures reliability through the number of **momentary interruptions**: the number of **momentary interruptions** for the **disclosure year**;

28.4 **Where** **Transpower** must **publicly disclose** at the same time as its **annual compliance statement**:

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

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

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

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

28.5 **Where** **asset performance measure AP1**, as calculated in accordance with clause 19.3.3, is lower than the **collar** value specified in Table 4.2, **Transpower** must **publicly disclose** at the same time as its **annual compliance statement**:

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

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

28.5.3 the impact on **customers** for the events described in clause 28.5.1;

**Commented [A48]:** "Where" is redundant in this clause.

**Commented [A49]:** In many (possibly most) cases we will not know the cause of a momentary interruption, so this clause should include "(if known)".

All of the subclauses of clause 28.4 (with the possible exception of clause 28.4.4) should be limited to momentary interruptions "for the disclosure year".

**Commented [A50]:** Clauses 28.5 duplicates information already required to be provided under clause 25.1.1.

This comment also applies to clause 28.6.

**Commented [A51]:** The subclauses of clause 28.5 require Transpower to focus on individual events when performance is a function of all events. It is not possible for Transpower to select particular events that "caused" performance to go below the collar.

This comment also applies to clause 28.6.

**Commented [A52]:** This should be deleted. Transpower is unlikely to know what the impact on customers was.

This comment also applies to clause 28.6.3.

28.5.4 actions **Transpower** has taken to minimise the effect of the events described in clause 28.5.1; and

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

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

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

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

28.6.3 the impact on **customers** for the events described in clause 28.6.1;

28.6.4 actions **Transpower** has taken to minimise the effect of the events described in clause 28.6.1; and

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

28.7 Where **Transpower** has not complied with the **asset health measure AH standard** for an **asset health measure asset class**, as specified in clause 21.1, it must **publicly disclose** at the same time as its **annual compliance statement**:

**Commented [A53]:** This should be "quality standard".

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

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

## 29. Wash-up building blocks calculation

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

29.1.1 the approach and formulae specified in Schedule E;

29.1.2 the **opening RAB value**;

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

29.1.4 the **WACC**;

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

29.1.6 the **opex allowance**, excluding operating lease payments capitalised in accordance with the **Transpower IM**, being:



- (a) for the **disclosure year** from 1 July 2020 to 30 June 2021, \$271.5 million;
  - (b) for the **disclosure year** from 1 July 2021 to 30 June 2022, \$276.0 million;
  - (c) for the **disclosure year** from 1 July 2022 to 30 June 2023, \$286.0 million;
  - (d) for the **disclosure year** from 1 July 2023 to 30 June 2024, \$295.6 million; and
  - (e) for the **disclosure year** from 1 July 2024 to 30 June 2025, \$295.9 million;
- 29.1.7 the **corporate tax rate**;
- 29.1.8 the **regulatory tax allowance** calculated:
- (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);
- 29.1.9 the **term credit spread differential allowance**;
- 29.1.10 for actual revenues received by **Transpower**:
- (a) the **actual transmission revenue** received in the **pricing year**, as converted to a **disclosure year** value in accordance with clause 9.2; and
  - (b) the sum of **other regulated income** received in the **disclosure year**;
- 29.1.11 the amount of the **forecast EV adjustment** included in the **forecast MAR**;
- 29.1.12 the actual **pass-through costs** and **recoverable costs** calculated in accordance with Schedule H; and

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

29.2 For the purposes of any disparity adjustments for calculating the **ex-post economic gain or loss** in clause 29.1, and for any disparity adjustments for calculating the **opex incentive amount** in clause 33.1-33.2, the **forecast CPI** that applied when the **opex allowance** and **forecast opex** were determined is:

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

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

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

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

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

30. Transpower to propose update of forecast SMAR

30.1 **Transpower** must provide the following information when proposing an update of a **forecast MAR** and **forecast SMAR** for the purposes of clause 8.5:

30.1.1 an update of a **forecast MAR** and **forecast SMAR** for each remaining complete **pricing year** in **RCP3**, calculated in a manner consistent with the approach for calculating the **forecast SMAR** for the full period of **RCP3**, including, where applicable, to take account of the incremental revenue effect of:

- (a) forecast **major capex** approved by the **Commission** in the most recently completed **disclosure year**;
- (b) **base capex** approved by the **Commission** in the most recently completed **disclosure year** relating to one or more of the **listed projects** in Schedule I; and
- (c) an updated **forecast EV adjustment** calculated for the **forecast MAR** in accordance with clause 32;

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

30.1.3 where applicable, a proposed updated summary of the **forecast MAR** and the **forecast SMAR** as set out in Schedule A;

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

30.1.5 be accompanied by an **independent assurance report** procured and prepared in accordance with clause 34.

**Commented [A54]:** These words should be deleted to preserve the logic of the list.

- 30.2 for the purposes of clause 30.1.1, the calculation of the update of a **forecast MAR** used in calculating the update of the **forecast SMAR** must, where applicable, use:
- (a) the approach and formulae specified in Schedule D;
  - (b) the forecast **opening RAB value**;
  - (c) the forecast amounts by month of **commissioning** in the **disclosure year** for **value of commissioned asset** of approved **base capex** and **major capex**;
  - (d) the **low incentive rate base capex allowance** in accordance with Schedule C1, Column 7;
  - (e) the **standard incentive rate base capex allowance** in accordance with Schedule C2, Column 7;
  - (f) the **WACC**;
  - (g) forecast **depreciation**, including a forecast of any capitalised interest **depreciation** adjustment required to align **Transpower's** cost of financing on its **works under construction** with the requirements of clause 2.2.7(2) of the **Transpower IM**;
  - (h) the forecast **regulatory tax allowance** calculated:
    - (i) by applying the **tax rules** and **corporate tax rate** to the forecast regulatory profit/(loss) before tax in accordance with Part 2, Subpart 3 of the **Transpower IM**;
    - (ii) using the **term credit spread differential allowance** calculated in accordance with Part 3, Subpart 5 of the **Transpower IM**; and
    - (iii) using as the amount of forecast regulatory profit/(loss) before tax for the purpose of this calculation, the sum of:
      - (A) the forecast of the regulatory profit/(loss) before tax calculated using the calculation basis required for disclosure under the **ID determination**; and
      - (B) the forecast of the **term credit spread differential allowance** calculated in accordance with Part 3, Subpart 5 of the **Transpower IM**;
  - (i) the **forecast EV adjustment** amounts specified in clauses 32.1.1 to 32.1.5, adjusted, where applicable, in accordance with clauses 32.2 and 32.3;
  - (j) the forecast **pass-through costs**, being:

- (i) for the **disclosure year** from 1 July 2020 to 30 June 2021, [\$16.2 million];
  - (ii) for the **disclosure year** from 1 July 2021 to 30 June 2022, [\$16.5 million];
  - (iii) for the **disclosure year** from 1 July 2022 to 30 June 2023, [\$16.8 million];
  - (iv) for the **disclosure year** from 1 July 2023 to 30 June 2024, [\$17.1 million]; and
  - (v) for the **disclosure year** from 1 July 2024 to 30 June 2025, [\$17.5 million];
- (k) the forecast **recoverable costs**, being:
- (i) for the **disclosure year** from 1 July 2020 to 30 June 2021, [\$30.7 million];
  - (ii) for the **disclosure year** from 1 July 2021 to 30 June 2022, [\$25.8 million];
  - (iii) for the **disclosure year** from 1 July 2022 to 30 June 2023, [\$18.3 million];
  - (iv) for the **disclosure year** from 1 July 2023 to 30 June 2024, [\$23.9 million]; and
  - (v) for the **disclosure year** from 1 July 2024 to 30 June 2025, [\$25.1 million]; and
- (l) the **opex allowance** set out in clause 29.1.6.
- 30.3 The calculation of an update of the **forecast SMAR**, must, where applicable, use:
- 30.3.1 the update of the **forecast MAR** calculated in accordance with clause 30.2;
- 30.3.2 the conversion of the updated **forecast MAR** for each remaining complete **pricing year** in **RCP3** to **forecast SMAR** calculated in accordance with clause 8.3, where the updated present value of the **forecast SMAR** for the remaining complete **pricing years** in **RCP3** must equal the present value of the updated **forecast MAR** for the remaining complete **pricing years** in **RCP3**, determined using the **WACC**, and the **forecast SMAR** follows a trend equivalent to the **IPP revenue growth rate**; and
- 30.3.3 the **IPP revenue growth rate** for each **pricing year** of **RCP3** as specified in clause 8.4.

**Commented [A55]:** Given that the IPP revenue growth rate is defined as a maximum, this should be:

...follows a trend **no greater than the IPP revenue growth rate**...

**Commented [A56]:** This is redundant as "IPP revenue growth rate" is a defined term and the definition refers to clause 8.4.

- 30.4 For the purposes of determining the revenue impact of **major capex** approved by the **Commission** or of **base capex** approved by the **Commission** relating to **listed projects**, **Transpower** must:
- 30.4.1 identify each **major capex project** approved by the **Commission** in the **disclosure year** if **project** assets are forecast to be **commissioned** during the period from 1 July 2020 to 30 June 2025;
  - 30.4.2 identify each **listed project** for which **base capex** is approved by the **Commission** in the **disclosure year** if **project** assets are forecast to be **commissioned** during the period from 1 July 2020 to 30 June 2025; and
  - 30.4.3 for each **project** identified in accordance with subclauses 30.4.1 and 30.4.2, separately detail:
    - (a) the forecast date, or dates, that **project** assets are forecast to be **commissioned**; and
    - (b) the incremental revenue impact of the forecast **commissioning** of **project** assets on each applicable future **forecast SMAR** and **forecast MAR**.

31. EV account summary

- 31.1 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:
- 31.1.1 a reconciliation of the opening and closing balances of the **EV account** that takes into account:
    - (a) the opening balance of the **EV account**;
    - (b) the calculation of interest at the post-tax estimate corresponding to **WACC** on the opening balance of the **EV account**;
    - (c) **Transpower's** allocation of **EV account entries** to the respective **HVAC** and **HVDC customers**; and
    - (d) post-tax amounts included in calculating the **forecast EV adjustments** in respect of the closing **EV account** balance for the final **disclosure year** of **RCP2**;
  - 31.1.2 the forecast **EV account** balance at the end of **RCP3**, taking into account **forecast EV adjustments** and interest at the post-tax estimate corresponding to **WACC** on the forecast opening **EV account** balance for each **disclosure year**;

- 31.1.3 the source of calculation of the **EV account entries** referred to in subclause 31.1.1(c) for:
- (a) the **ex-post economic gain or loss** calculated for the final **disclosure year** of RCP2;
  - (b) the after-tax gain or loss in respect of an **instrument that ceases to be an effective hedge** for the final **disclosure year** of RCP2;
  - (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**.

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

- 31.2.1 the **major capex incentive rate**;
- 31.2.2 the **base capex standard incentive rate**;
- 31.2.3 the **base capex low incentive rate**;
- 31.2.4 the **low incentive rate base capex allowance** in accordance with Schedule C3, Column 7;
- 31.2.5 the **standard incentive rate base capex allowance** in accordance with Schedule C4, Column 7;
- 31.2.6 the **forecast CPI** used to determine the **low incentive rate base capex allowance** and the **standard incentive rate base capex allowance** in Schedule C3, Column 7 and Schedule C4, Column 7:
  - (a) for the **disclosure year** from 1 July 2020 to 30 June 2021, 1.90%;
  - (b) for the **disclosure year** from 1 July 2021 to 30 June 2022, 2.10%;

- (c) for the **disclosure year** from 1 July 2022 to 30 June 2023, 2.00%;
  - (d) for the **disclosure year** from 1 July 2023 to 30 June 2024, 2.00%; and
  - (e) for the **disclosure year** from 1 July 2024 to 30 June 2025, 2.00%;
- 31.2.7 the **forecast FX rate** used to determine the **low incentive rate base capex allowance** and the **standard incentive rate base capex allowance** in Schedule C3, Column 7 and Schedule C4, Column 7, for the conversion of US dollars to NZ dollars:
- (a) for the **disclosure year** from 1 July 2020 to 30 June 2021, 0.66;
  - (b) for the **disclosure year** from 1 July 2021 to 30 June 2022, 0.66;
  - (c) for the **disclosure year** from 1 July 2022 to 30 June 2023, 0.66;
  - (d) for the **disclosure year** from 1 July 2023 to 30 June 2024, 0.66; and
  - (e) for the **disclosure year** from 1 July 2024 to 30 June 2025, 0.66;
- 31.2.8 the **forecast FX rate** used to determine the **low incentive rate base capex allowance** and the **standard incentive rate base capex allowance** in Schedule C3, Column 7 and Schedule C4, Column 7 for the conversion of the following currencies to NZ dollars:
- (a) Euro: for each **disclosure year** in **RCP3**, 0.50;
  - (b) British pound: for each **disclosure year** in **RCP3**, 0.47;
  - (c) Australian dollar: for each **disclosure year** in **RCP3**, 0.91;
  - (d) Japanese yen: for each **disclosure year** in **RCP3**, 73.40;
  - (e) Swedish kroner: for each **disclosure year** in **RCP3**, 5.35; and
  - (f) Canadian dollar: for each **disclosure year** in **RCP3**, 0.85; and
- 31.2.9 the amount of the **standard incentive rate base capex allowance** to which the **forecast FX rate** applies for the purposes of determining the **standard incentive rate base capex allowance** in Schedule C4, Column 7 is as set out in Table 5.1:

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

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

### 32. Forecast EV adjustment

32.1 For the purposes of calculating an update of the **forecast MAR** for a **pricing year**, and subject to clause 32.2, the **forecast EV adjustment** amounts applied in calculating the initial **forecast MAR**, in respect of the closing **EV account** balance for the final **disclosure year** of **RCP2**, are:

- 32.1.1 for the **disclosure year** from 1 July 2020 to 30 June 2021, [-\$21.0 million];
- 32.1.2 for the **disclosure year** from 1 July 2021 to 30 June 2022, [-\$21.0 million];
- 32.1.3 for the **disclosure year** from 1 July 2022 to 30 June 2023, [-\$21.0 million];
- 32.1.4 for the **disclosure year** from 1 July 2023 to 30 June 2024, [-\$21.0 million];
- 32.1.5 for the **disclosure year** from 1 July 2024 to 30 June 2025, [-\$21.0 million]; and
- 32.1.6 a tax gross-up amount calculated at the **corporate tax rate**, and applying the **tax rules** where applicable, in respect of all after-tax amounts calculated in subclauses 32.1.1 to 32.1.5 in order to express the **forecast EV adjustment** amounts on a pre-tax basis in the **forecast MAR** building block inputs.



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

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

32.2.2 if the same annual **forecast EV adjustment** amount as in clause 32.2.1 was applied for each of the five **pricing years** following the end of **RCP3**, the forecast balance of the **EV account** would be zero at the end of that period.

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.

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

33.1 For the calculation of the **opex incentive amount**, the amount of **forecast opex** specified by the **Commission** for **IRIS** calculations is specified in clause 33.2, as adjusted for any disparity between the **forecast CPI** that applied when the **forecast opex** was initially determined and the **CPI**.

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

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

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

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

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

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

33.3 For the purposes of clause 33.1 and any disparity adjustments in calculating the **opex incentive amount**, the **forecast CPI** that applied when the **forecast opex** was determined is the same as that set out in clause 29.2.

34. Independent assurance report

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

35. Exemptions

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

35.1.1 exempt **Transpower** from any of the information disclosure requirements contained in clauses 23.2.1(b), 25, 26, and 28.1 to 28.3 of this determination, for a period and on such terms and conditions as the **Commission** specifies in the notice; and

35.1.2 amend or revoke any such exemption.

**Commented [A57]:** The exemption power should apply to any of the information disclosure requirements in clauses 23.2, 24 to 26 and 28.

**Schedule A: Summary of forecast MAR and forecast SMAR**

Forecast MAR applied to pricing years in RCP3 ending	Forecast MAR is calculated based on building block values for the disclosure year ending	Initial determined value of forecast MAR for pricing year	Incremental update to forecast MAR determined in November 2020	Incremental update to forecast MAR determined in November 2021	Incremental update to forecast MAR determined in November 2022	Incremental update to forecast MAR determined in November 2023	Total forecast MAR applicable to the pricing year (sum of amounts in columns 3 to 7)	Forecast SMAR applicable to the pricing years in RCP3
[Column 1]	[Column 2]	[Column 3]	[Column 4]	[Column 5]	[Column 6]	[Column 7]	[Column 8]	[Column 9]
31 March 2021 (Year 1)	30 June 2021	[\$834.6 million]	N/A	N/A	N/A	N/A	[\$834.6 million]	[\$831.6 million]
31 March 2022 (Year 2)	30 June 2022	[\$836.6 million]	\$X.X million	N/A	N/A	N/A	[\$836.6 million]	[\$839.8 million]
31 March 2023 (Year 3)	30 June 2023	[\$840.3 million]	\$XX million	\$X.X million	N/A	N/A	[\$840.3 million]	[\$848.2 million]
31 March 2024 (Year 4)	30 June 2024	[\$861.9 million]	\$X.X million	\$X.X million	\$X.X million	N/A	[\$861.9 million]	[\$856.8 million]
31 March 2025 (Year 5)	30 June 2025	[\$868.8 million]	\$X.X million	\$X.X million	\$X.X million	\$X.X million	[\$868.8 million]	[\$865.4 million]

**Schedule B: EV account summary**

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

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

Disclosure year ending	Value of low incentive rate base capex allowances as determined 29 August 2019	Incremental approved low incentive rate listed project base capex determined in November 2020	Incremental approved low incentive rate listed project base capex determined in November 2021	Incremental approved low incentive rate listed project base capex determined in November 2022	Incremental approved low incentive rate listed project base capex determined in November 2023	Approved low incentive rate base capex allowances for purposes of forecast MAR in the disclosure year (sum of amounts in columns 2 to 6)
[Column 1]	[Column 2]	[Column 3]	[Column 4]	[Column 5]	[Column 6]	[Column 7]
30 June 2021	\$0 million	N/A	N/A	N/A	N/A	\$0 million
30 June 2022	\$0 million	\$XX.X million	N/A	N/A	N/A	\$0 million
30 June 2023	\$0 million	\$XX.X million	\$XX.X million	N/A	N/A	\$0 million
30 June 2024	\$0 million	\$XX.X million	\$XX.X million	\$XX.X million	N/A	\$0 million
30 June 2025	\$0 million	\$XX.X million	\$XX.X million	\$XX.X million	\$XX.X million	\$0 million

### Schedule C2: Approved standard incentive rate base capex summary – commissioned basis

(including capitalised operating leases)

Disclosure year ending	Value of standard incentive rate base capex allowance as determined 29 August 2019	Incremental approved standard incentive rate listed project base capex determined in November 2020	Incremental approved standard incentive rate listed project base capex determined in November 2021	Incremental approved standard incentive rate listed project base capex determined in November 2022	Incremental approved standard incentive rate listed project base capex determined in November 2023	Approved standard incentive rate base capex allowance for purposes of forecast MAR in the disclosure year (sum of amounts in columns 2 to 6)
[Column 1]	[Column 2]	[Column 3]	[Column 4]	[Column 5]	[Column 6]	[Column 7]
30 June 2021	\$222.9 million	N/A	N/A	N/A	N/A	\$222.9 million
30 June 2022	\$277.3 million	\$XX.X million	N/A	N/A	N/A	\$277.3 million
30 June 2023	\$273.9 million	\$XX.X million	\$XX.X million	N/A	N/A	\$273.9 million
30 June 2024	\$280.0 million	\$XX.X million	\$XX.X million	\$XX.X million	N/A	\$280.0 million
30 June 2025	\$300.2 million	\$XX.X million	\$XX.X million	\$XX.X million	\$XX.X million	\$300.2 million

**Commented [A58]:** The numbers in Schedule C2 should be in Schedule C4 and vice versa.

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

Disclosure year ending	Value of low incentive rate base capex allowances as determined 29 August 2019	Incremental approved low incentive rate listed project base capex determined in November 2020	Incremental approved low incentive rate listed project base capex determined in November 2021	Incremental approved low incentive rate listed project base capex determined in November 2022	Incremental approved low incentive rate listed project base capex determined in November 2023	Approved base capex for purposes of base capex expenditure adjustments in the disclosure year (sum of amounts in columns 2 to 6)
[Column 1]	[Column 2]	[Column 3]	[Column 4]	[Column 5]	[Column 6]	[Column 7]
30 June 2021	\$0 million	N/A	N/A	N/A	N/A	\$0 million
30 June 2022	\$0 million	\$XX.X million	N/A	N/A	N/A	\$0 million
30 June 2023	\$0 million	\$XX.X million	\$XX.X million	N/A	N/A	\$0 million
30 June 2024	\$0 million	\$XX.X million	\$XX.X million	\$XX.X million	N/A	\$0 million
30 June 2025	\$0 million	\$XX.X million	\$XX.X million	\$XX.X million	\$XX.X million	\$0 million



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

Disclosure year ending	Value of standard incentive rate base capex allowance as determined 29 August 2019	Incremental approved listed project base capex determined in November 2020	Incremental approved listed project base capex determined in November 2021	Incremental approved listed project base capex determined in November 2022	Incremental approved listed project base capex determined in November 2023	Approved base capex for purposes of base capex expenditure adjustments in the disclosure year (sum of amounts in columns 2 to 6)
[Column 1]	[Column 2]	[Column 3]	[Column 4]	[Column 5]	[Column 6]	[Column 7]
30 June 2021	\$206.7 million	N/A	N/A	N/A	N/A	\$206.7 million
30 June 2022	\$266.8 million	\$XX.X million	N/A	N/A	N/A	\$266.8 million
30 June 2023	\$303.3 million	\$XX.X million	\$XX.X million	N/A	N/A	\$303.3 million
30 June 2024	\$274.8 million	\$XX.X million	\$XX.X million	\$XX.X million	N/A	\$274.8 million
30 June 2025	\$347.2 million	\$XX.X million	\$XX.X million	\$XX.X million	\$XX.X million	\$347.2 million

**Commented [A59]:** The numbers in Schedule C4 should be in Schedule C2 and vice versa.

### Schedule D: Forecast MAR building blocks calculation

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

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

FORECAST MAR BUILDING BLOCK	DESCRIPTION OF NOMINAL VALUE INPUT TO BE APPLIED	FORMULA FOR FORECAST INCOME/ EXPENDITURE/ OTHER NOMINAL VALUES	CASH FLOW TIMING FACTOR TO APPLY TO FORECAST NOMINAL VALUE INPUT	FORECAST MAR BUILDING BLOCK VALUE
[Column 1]	[Column 2]	[Column 3]	[Column 4]	[Column 5]
Forecast depreciation	Forecast <b>depreciation</b>	E	$1 / (1 + A1)^{163/365}$	$E / (1 + A1)^{163/365}$
Operating expenditure	<b>Opex allowance</b> as specified in clause 29.1.6.	F	$(1 + A1)^{19/365}$	$F \times (1 + A1)^{19/365}$
Forecast tax	Forecast <b>regulatory tax allowance</b> , calculated in accordance with clause 30.1.2(h)	G	$(1 + A1)^{19/365}$	$G \times (1 + A1)^{19/365}$
Forecast TCSD	Forecast <b>term credit spread differential allowance</b> , calculated in accordance with Part 3, Subpart 5 of the <b>Transpower IM</b>	H	$(1 + A1)^{19/365}$	$H \times (1 + A1)^{19/365}$
Forecast EV adjustment	<b>Forecast EV adjustment</b> , as specified in clauses 32.1.1 to 32.3, including a tax gross up calculated at the <b>corporate tax rate</b>	I	$1 / (1 + A1)^{163/365}$	$I / (1 + A1)^{163/365}$

FORECAST MAR BUILDING BLOCK	DESCRIPTION OF NOMINAL VALUE INPUT TO BE APPLIED	FORMULA FOR FORECAST INCOME/ EXPENDITURE/ OTHER NOMINAL VALUES	CASH FLOW TIMING FACTOR TO APPLY TO FORECAST NOMINAL VALUE INPUT	FORECAST MAR BUILDING BLOCK VALUE
[Column 1]	[Column 2]	[Column 3]	[Column 4]	[Column 5]
Forecast pass-through costs	Forecast <b>pass-through costs</b> in accordance with Part 3, Subpart 1 of the <b>Transpower IM</b> , as specified in clauses 30.1.2(j)	J	$(1 + A1)^{19/365}$	$L \times (1 + A1)^{19/365}$
Forecast recoverable costs	Forecast <b>recoverable costs</b> in accordance with Part 3, Subpart 1 of the <b>Transpower IM</b> , as specified in clauses 30.1.2(k)	K	$(1 + A1)^{19/365}$	$M \times (1 + A1)^{19/365}$
<b>TOTAL FORECAST MAR INCLUSIVE OF FORECAST PASS-THROUGH COSTS AND FORECAST RECOVERABLE COSTS</b>	Sum of <b>forecast MAR</b> building block values			Sum L = Sum D plus sum of <b>forecast MAR</b> building block values E to K

**Commented [A60]:** This cross-reference should be to clause 30.2(k).

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

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

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

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

**Commented [A61]:** This cross-reference is incorrect. Perhaps it should be clause 29.1.10(a).



WASH-UP BUILDING BLOCK	DESCRIPTION OF NOMINAL VALUE INPUT TO BE APPLIED	FORMULA FOR INCOME/ EXPENDITURE/ OTHER NOMINAL VALUES	CASH FLOW TIMING FACTOR TO APPLY TO NOMINAL VALUE INPUT	WASH-UP VALUE
[Column 1]	[Column 2]	[Column 3]	[Column 4]	[Column 5]
Operating expenditure	<b>Opex allowance</b> as specified in clause 29.1.6, and as adjusted for any disparity between the <b>forecast CPI</b> specified in clause 29.2 and actual <b>CPI</b>	N	$(1 + A1)^{182/365}$	$N \times (1 + A1)^{182/365}$
Depreciation	<b>Depreciation</b> (excluding <b>depreciation on disposed assets</b> )	O		O
TCSD	The <b>term credit spread differential allowance</b> , calculated in accordance with Part 3, Subpart 5 of the <b>Transpower IM</b>	P	$(1 + A1)^{182/365}$	$P \times (1 + A1)^{182/365}$
Pass-through costs and recoverable costs	<b>Pass-through costs and recoverable costs</b> as set out in Schedule H, Formulae F and M.	Q	$(1 + A1)^{182/365}$	$Q \times (1 + A1)^{182/365}$
Net operating profit/(loss) before tax	Sum of wash-up values for formulas M through P			Sum R = Sum M, less wash-up values N to Q
Tax	The <b>regulatory tax allowance</b> calculated in accordance with clause 29.1.10	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 and S			Sum T = Sum R, less wash-up value S

**Commented [A62]:** This cross-reference should be to clause 29.1.8.

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

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

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

RCP3 Sub-Category	Measure reference	Point of service	Customer
N-1 security material economic consequence	GP1B and GP2B	CBG011_S1	WAIP
N security material economic consequence	GP1D and GP2D	CLH011_S1	ORON
N-1 security material economic consequence	GP1B and GP2B	CML033_S1	DUNE
N security material economic consequence	GP1D and GP2D	COL011_S1	ORON
N-1 security generator	GP1E and GP2E	COL066_I1	TRUS
N-1 security material economic consequence	GP1B and GP2B	CPK011_S1	WELL
N-1 security high economic consequence	GP1A and GP2A	CPK033_S1	WELL
N-1 security material economic consequence	GP1B and GP2B	CST033_S1	POCO
N-1 security material economic consequence	GP1B and GP2B	CUL033_S1	MPOW
N security material economic consequence	GP1D and GP2D	CUL066_S1	MPOW
N-1 security material economic consequence	GP1B and GP2B	CYD033_S1	DUNE
N-1 security generator	GP1E and GP2E	CYD220_I1	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 kV Circuit 1
OHW_WKM_1	Ohinewai–Whakamaru 220 kV Circuit 1
PAK_WKM_1	Pakuranga–Whakamaru 220 kV Circuit 1
PAK_WKM_2	Pakuranga–Whakamaru 220 kV Circuit 2
RDF_T3	Redclyffe 220/110 kV Interconnecting Transformer T3
RDF_T4	Redclyffe 220/110 kV Interconnecting Transformer T4
RPO_TNG_1	Rangip–Tangiwai 220 kV Circuit 1
RPO_WRK_1	Rangipo–Wairakei 220 kV Circuit 1
SFD_T10	Stratford 220 / 110 kV Interconnecting Transformer T10
SFD_TMN_1	Stratford–Taumarunui 220 kV Circuit 1
THI_WKM_1	Te Mihi–Whakamaru 220 kV Circuit 1
THI_WRK_1	Te Mihi–Wairakei 220 kV Circuit 1
TKB_TWZ_1	Tekapo B Twizel 220 kV Circuit 1
TKU_WKM_1	Tokaanu–Whakamaru 220 kV Circuit 1
TKU_WKM_2	Tokaanu–Whakamaru 220 kV Circuit 2
TMN_TWH_1	Taumarunui–Te Kowhai 220 kV Circuit 1
WKM_WRK_1	Whakamaru–Wairakei 220 kV Circuit 1

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

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

**Schedule I: Listed projects**

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



[Date] 2019

To: Transpower New Zealand Limited  
PO Box 1021  
WELLINGTON

**[DRAFT] Notice to supply information to the Commerce Commission under section 53ZD(1)(d), (e), and (f) of the Commerce Act 1986 - Requirements for asset health and risk modelling information**

*Background*

1. In our August 2019 decisions and reasons paper for the individual price-quality path that will apply to Transpower New Zealand Limited (**Transpower**) from 1 April 2020, we (the Commerce Commission – the **Commission**) identified that we would issue an information request to **Transpower** under section 53ZD(1) of Commerce Act 1986 (the **Act**) to provide us with information regarding its asset health and risk modelling.
2. We now require this information from **Transpower** under section 53ZD(1)(d), (e) and (f) of the **Act**. Specifically, we require **Transpower**:<sup>1</sup>
  - 2.1 under s 53ZD(1)(d) of the **Act**, to produce a roadmap at the start of **RCP3** setting out plans for developing its asset health and risk models, asset life-extension models, and risk-based decision-making frameworks in preparation for its **RCP4** proposal (**development roadmap**);
  - 2.2 under s 53ZD(1)(e) of the **Act**, to provide information annually on its progress in developing asset health and risk models, asset life-extension models, and risk-based decision-making frameworks (**annual update**); and
  - 2.3 under s 53ZD(1)(f) of the **Act**, to obtain an opinion (**expert opinion**) midway through **RCP3** from an **independent expert** on **Transpower's** progress in developing its asset health and risk models, asset life-extension models, and risk-based decision-making frameworks.
3. The information is to give us confidence in the evaluation process for **RCP4**.

**Commented [TP1]:** The terms of reference (ToR) for the expert opinion are not mentioned in this list, or formally requested anywhere in the notice. The ToR is only described in Schedule A.

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<sup>1</sup> Commerce Commission "Transpower's individual price-quality path from 1 April 2020 – Decisions and reason paper" (29 August 2019), at [L71].

4. The specific requirements for the **development roadmap, annual update, and expert report** are set out in Schedule A of this notice.
5. We note that section 103 of the **Act** provides that no person shall:
  - 5.1 without reasonable excuse, refuse or fail to comply with a notice under section 53ZD of the **Act**;
  - 5.2 in purported compliance with such a notice, furnish information, or produce a document, or give evidence, knowing it to be false or misleading; or
  - 5.3 attempt to deceive or knowingly mislead the **Commission** in relation to any matter before it.
6. It is an offence to contravene section 103 of the **Act** and any person who does so is liable on summary conviction to a fine not exceeding \$100,000 in the case of an individual or \$300,000 in the case of a body corporate.

#### *Purpose of the Notice*

7. We require this information because we seek to understand the development path of **Transpower's** asset health modelling and risk understanding over **RCP3** in preparation for **RCP4**. This understanding will inform and assist our function under s 53P of the **Act** of assessing and resetting **Transpower's base capex, operating expenditure, and quality standards** for **RCP4**.
8. In particular, the **annual update** will assist our ongoing investigation into **Transpower's** progress in developing its asset health and risk models, asset life-extension models, and risk-based decision-making frameworks. Improving our understanding of these matters will better enable us to consider and assess, for example, the relationship between **grid output measures** proposed for **RCP4** and **Transpower capex and operating expenditure**.

#### *Date, place and format of responses*

9. **Transpower** must supply the **development roadmap** no later than 105 **working days** from the end of the final **disclosure year** of **RCP2**.
10. **Transpower** must prepare and provide proposed terms of reference for the **expert opinion** (the **terms of reference**) to the **Commission** by no later than 28 February 2021. **Transpower** must provide for any feedback the **Commission** provides on the proposed **terms of reference**, and finalise the **terms of reference** by no later than 31 March 2021.
11. **Transpower** must supply the **expert opinion** no later than 105 **working days** from the **disclosure year** ending 30 June 2022.
12. **Transpower** must supply each **annual update** no later than 105 **working days** from the end of the relevant **disclosure year**.
13. The **Commission** may, at its absolute discretion, on **Transpower's** application, grant **Transpower** an extension to the time limits set out in clauses ~~8, 9,~~ 10 and 11 of this **notice**.

**Commented [TP2]:** The RCP4 IPP will be determined in August 2024 (clause 2.2.2(1) of the Capex IM).

If the purpose of the information is to assist with setting the RCP4 IPP, we should not be required to provide the annual update for the last or second to last disclosure year of RCP3 because by that stage the RCP4 IPP will already have been determined.

**Commented [TP3]:** We suggest this clause be expanded to allow Transpower to apply for an exemption as well as an extension, as is proposed for information to be disclosed under the IPP (clause 35 of the draft IPP). This will allow the notice requirements to be flexible if it transpires certain information cannot reasonably be provided or there is better information to meet the Commission's purpose than specified in the notice.

We suggest clauses 13 and 14 be redrafted as follows:

13. The **Commission** may, at its absolute discretion, on **Transpower's** application, grant **Transpower**:

13.1 an extension to the time limits set out in clauses 9, 10 and 11 of this notice; or

13.2 an exemption from any of the information disclosure requirements of this notice.

14. For the purposes of clause 13:

14.1 where Transpower applies for an extension or exemption, its application must:

14.1.1 explain why **Transpower** considers that the extension or exemption is reasonably justified having regard to the circumstances;

14.1.2 in the case of an exemption, describe any alternative information **Transpower** proposes to disclose to meet the purpose of this notice; and

14.1.3 be made no later than 15 **working days** before the applicable time limit is due to expire; and

14.2 in circumstances where the **Commission** decides to grant **Transpower** an extension or exemption:

14.2.1 the extension or exemption shall be effected by giving or posting notice of the extension to **Transpower**;

14.2.2 a notice effecting an extension must specify the period of the extension and the reasons for the extension; and

14.2.3 a notice effecting an exemption must specify the scope of the exemption, any conditions of the exemption and the reasons for the exemption.

14. For the purposes of clause 13:

14.1 where Transpower applies for an extension, its application **must**:

14.1.1 explain why **Transpower** considers that an extension to the time limit is reasonably justified having regard to the circumstances; and

14.1.2 be made no later than 15 **working days** before the applicable time limit is due to expire; and

14.2 in circumstances where the **Commission** decides to grant **Transpower** an extension:

14.2.1 the extension shall be effected by giving or posting notice of the extension to **Transpower**; and

14.2.2 the notice effecting the extension must specify the period of the extension and the reasons for the extension.

15. **Transpower** must provide the **Commission** with the information required under this notice by either supplying the information directly to the **Commission**, or by making the information publicly available on **Transpower's** website, and by notifying the **Commission** that it has done so.

16. Where information must be supplied, or where notice must be given to the **Commission**, this must be done by no later than 4:30pm on the date specified.

17. Where **Transpower** is required to notify the **Commission**, it must do so by email to [regulation.branch@comcom.govt.nz](mailto:regulation.branch@comcom.govt.nz) (Attention: Manager Price-Quality Regulation), with the subject line "Transpower- Response to section 53ZD Notice – Asset management: Issued November 2019".

#### *Directors' certificate*

18. Subject to clauses 13-14, for the **development roadmap** and for each **annual update**, **Transpower** must provide to the **Commission** a **directors' certificate** no later than 105 **working days** from the end of the relevant **disclosure year**.

19. **Transpower** may combine the **directors' certificate** with the equivalent certification required for:

19.1 the **annual compliance statement**; and

19.2 the **Commission's** s 53ZD Notice – Customer consultation: Issued November 2019.

#### *Interpretation*

20. Unless the context otherwise requires—

20.1 terms used in this notice that are defined in the **Transpower IM Determination** or the **Capex IM Determination**, but not in this notice, have the meaning given in the **Transpower IM Determination** or **Capex IM Determination**, as applicable;

20.2 a word which denotes the singular also denotes the plural and vice versa;

**Commented [TP4]:** Each notice should allow us to use reasonable endeavours to provide the information requested, avoiding undue exposure to non-compliance risk.

**Commented [TP5]:** A Director's certificate should not be called for. Please refer to our submission letter.

- 20.3 **annual compliance statement** has the same meaning as defined in the **IPP determination**;
- 20.4 **capex** has the same meaning as defined in the **Capex IM Determination**;
- 20.5 **Capex IM Determination** means *Transpower Capital Expenditure Input Methodology Determination* [2012] NZCC 2;
- 20.6 **directors' certificate** means a certificate signed by two directors of **Transpower** in respect of the **development roadmap** and for each **annual update** to this notice, in the form set out in Schedule B of this notice, except that **Transpower** may modify the form in Schedule B to combine it with the equivalent certification for the **annual compliance statement** and the **Commission's** s 53ZD Notice – Customer consultation: Issued November 2019;
- 20.7 **disclosure year** has the same meaning as defined in the **Transpower IM Determination**;
- 20.8 **good electricity industry practice** has the meaning set out in the Electricity Industry Participation Code 2010;
- 20.9 **grid output measure** has the same meaning as defined in the **Capex IM Determination**;
- 20.10 **HVDC** means high voltage direct current;
- 20.11 **independent expert** means a person or organisation that:
- 20.11.1 has no relationship with, or interest in, **Transpower** that is likely to involve a conflict of interest between his, her or its duties to **Transpower** and his, her or its duties to the **Commission**; and
- 20.11.2 possesses sufficient expertise in the fields of asset management, asset health and network risk modelling;
- 20.12 **IPP** means individual price-quality path;
- 20.13 **IPP determination** means *Transpower Individual Price-Quality Path Determination 2020* [2019] NZCC [XX];
- 20.14 **operating expenditure** has the same meaning as defined in the **Transpower IM Determination**;
- 20.15 **quality standard** has the same meaning as defined in the **Capex IM Determination**;
- 20.16 **RCP2** means the regulatory 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;
- 20.17 **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;

**Commented [TP6]:** "Quality standard" is not defined in the Capex IM (or anywhere else we are aware of).

20.18 **RCP4** means the regulatory period following **RCP3**;

20.19 **Transpower IM Determination** means the *Transpower Input Methodologies Determination* [2012] NZCC 17; and

20.20 **working days** has the meaning given in the Commerce Act 1986.

*Use of supplied information and confidentiality*

21. If **Transpower** considers that, for confidentiality reasons, the **Commission** should not publish or publicly refer to any particular part of its response, **Transpower** must:
  - 21.1 specify the relevant part of the response and provide it to the **Commission**; and
  - 21.2 give clear reasons why **Transpower** considers that part of the response is confidential.
22. If **Transpower** indicates that we should not publish or publicly refer to part of its response, we will discuss with **Transpower** before deciding whether or not to do so.
23. Where information is not publicly disclosed, **Transpower** must provide an unredacted version of the response to the **Commission** at the following email address: regulation.branch@comcom.govt.nz (Attention: Manager Price-Quality Regulation) at the same time the redacted version of the response is published on **Transpower's website**.
24. However, please note that all responses we receive, including any parts that we decide not to publish, can be requested under the Official Information Act 1982. This means, that if requested, we would be required to release material (whether published or not) unless good reason existed under the Official Information Act 1982 to withhold it. We would normally consult before releasing any material that **Transpower** requests not to be published.

Dated at Wellington: [XX XXXX] 2019

Signed by:

[XXXX]  
Commissioner

**Commented [TP7]:** Clause 15 makes publishing that discretionary.

**Schedule A: Information required**

*Transpower to provide development roadmap for maturing asset health, asset life-extension and asset/network risk modelling*

- A1 **Transpower** must produce a **development roadmap** that identifies:
  - A1.1 the asset classes for which **Transpower** will further develop asset health models and asset life-extension models in line with the **Commission’s RCP3 decision**, including, but not limited to:
    - A1.1.1 ~~HVDC and dynamic reactive support assets: Transpower to develop bespoke HVDC and dynamic reactive support asset health models on applicable systems that make up these assets, which are based on asset criticality and condition models typically used in similar facilities. HVDC and dynamic reactive support assets: Transpower to develop bespoke HVDC and dynamic reactive support asset health models which are based on asset criticality and condition models typically used in power station facilities;~~
    - A1.1.2 Static reactive support assets;
    - A1.1.3 ~~Secondary assets – SA Protection, Battery Systems and Revenue Meters: Transpower to continue to implement asset life-extension modelling by further development of asset-centric health and criticality models; Secondary assets – SA Protection, Battery Systems and Revenue Meters: Transpower to implement its plans to develop a risk-based cost-benefit analysis framework for the evaluation of protection scheme capital expenditure planning; and~~
    - A1.1.4 ~~Secondary assets – SA Substation Management Systems: Transpower will actively track the failure rates of SMS assets and will replace devices on an age-based approach, balanced against the context of the wider system requirements Secondary assets – SA Substation Management Systems: Transpower to implement asset life-extension modelling by developing asset-centric health and criticality models;~~
  - A1.2 the asset and network risk-based decision-making frameworks that **Transpower** will develop;
  - A1.3 for each of the models and frameworks identified under clauses A1.1 and A1.2 above, the date at which **Transpower** expects each model and framework to be able to be used to:
    - A1.3.1 inform price/quality or asset investment/network risk trade-offs that can be made across the asset fleet (ie, how asset and network outage risk is affected by different asset investment strategies);

**Commented [TP8]:** The draft IPP determination released on 14 June described the development roadmap as “a plan for developing asset and network risk modelling for RCP3” (clause 21.1). In our view that would be a sufficient specification for the development roadmap without the further detail proposed below.

**Commented [TP9]:** These words are vague and unhelpful. We suggest they be deleted.

**Commented [TP10]:** See comment at A1.1.1.

**Commented [TP11]:** See comment at A1.1.1

**Commented [TP12]:** The words after the colon are overly prescriptive (contrast with clause A1.1.2). They should be deleted. This comment also applies to clauses A1.1.3 and A1.1.4.

If prescription must remain, we propose the following changes as shown to A1.1.1, A1.1.3 and A1.1.4.

**Commented [TP13]:** Please remove specificity of ‘date’ and use the term ‘timeframe’ to ensure we can comply with a more realistic assessment of timing.



- A1.3.2 sufficiently explain different investment strategies and the likely quality outcomes to external parties, firstly at a network level of granularity but with a goal to do this at each grid exit point; and
- A1.3.3 set forward-looking performance measures;
- A1.4 key milestones for the process of developing the asset and network risk modelling; and
- A1.5 the date **Transpower** expects to reach each milestone.

**Commented [TP14]:** 'Timeframe' is more realistic.

*Transpower to obtain an expert opinion on its progress*

- A2 **Transpower** must obtain an **expert opinion**, having regard to the maturity of **Transpower's** asset management practices identified under clauses A1.1 and A1.2, in the **disclosure year** 31 July 2021 to 30 June 2022.

**Commented [TP15]:** The independent expert is to report on network risk modelling, not asset management practices in general.

- A3 The **expert opinion** must:

- A3.1 give effect to, and be consistent with, the **terms of reference** finalised under clause 10 of this notice;
- A3.2 set out an assessment against **good electricity industry practice** of **Transpower's** progress towards implementing:
  - A3.2.1 the further development of its asset health and asset life-extension modelling, where this has been identified as not yet sufficiently and reasonably developed, in line with clause A1.1; and
  - A3.2.2 the further development of its asset and network risk-based decision-making frameworks, in line with clause A1.2 to enable network investment decision-making to be informed by risk during **RCP3** and in preparation for **RCP4**.

**Commented [TP16]:** The expert must implicitly endorse the roadmap but its assessment against GEIP could raise that the development approach is not consistent with GEIP.

The ToR should allow for departures from the road-map if doing so better meets GEIP.

*Transpower to provide annual update on its progress*

- A4 For each **disclosure year** of **RCP3**, **Transpower** must produce an **annual update** that sets out the following information:
  - A4.1 a statement of whether **Transpower** achieved the level of development, set out in the **development roadmap**, of asset health and risk models, asset life-extension models and risk-based decision-making frameworks;
  - A4.2 where **Transpower** has not achieved the level of development set out in the **development roadmap** in respect of one or more of asset health and risk models, asset life-extension models and risk-based decision-making frameworks:
    - A4.2.1 the difference between the level of progress **Transpower** achieved, and the level set out in its **development roadmap**;

**Commented [TP17]:** Clause A4 is overly prescriptive. The wording in the decision paper (page 417) would suffice – "Transpower to report annually on its progress towards implementing the development roadmap."

The form and content of the update should be left to our discretion, which could take into account any feedback from stakeholders on prior updates.

- A4.2.2 an explanation of the reasons for the difference; and
  - A4.2.3 the steps **Transpower** is taking in order to help ensure it still meets the deliverables of the **development roadmap**;
- A4.3 whether **Transpower** expects to achieve the level of progress set out in the **development roadmap** for the next **disclosure year** and, where it does not expect to achieve that level of progress:
- A4.3.1 the level of progress **Transpower** expects to achieve and how this compares to the **development roadmap**;
  - A4.3.2 an explanation of the reasons for the difference; and
  - A4.3.3 the steps **Transpower** is taking to help ensure that it will still meet the requirements of the **development roadmap**;
- A4.4 information about how the proposed **RCP3** asset health measures perform in each asset class, and in each year of **RCP3**, if these asset health measures had been revenue-linked as proposed by **Transpower** in its **RCP3** proposal;
- A4.5 information about how the proposed **RCP3** asset health measures perform in each asset class, and in each year of **RCP3**, where the actual percentage of assets with an asset health index (**AHI**) score greater than 8, exceed the collar value percentage of assets with an **AHI** score greater than 8, with the collar values set out in Table A1 below; and
- A4.6 in circumstances where **Transpower** proposes to do any additional work as a result of the **expert opinion**:
- A4.6.1 for the **disclosure year** from 1 July 2021 to 30 June 2022, how the additional work takes into account recommendations (if any) from the **expert opinion**, and a timeline for this additional work; and
  - A4.6.2 for each **disclosure year** from 1 July 2022 to 30 June 2025, the information contained in clauses A4.3.1 to A4.3.3 above in relation to the additional work described in clause A4.6.1.

**Table A1 AHI>8 percentage collar values**

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

## Schedule B: Director Certification of Information

**Commented [TP18]:** No certification should be called for. Please refer to our accompanying submission letter

### Directors' Certificate

We, [insert full name of first director] and [insert full name of second director], being directors of Transpower New Zealand Limited (Transpower), certify that, having made all reasonable enquiry, to the best of our knowledge and belief, the attached information, dated [insert date], complies in all material respects with the requirements of the Commerce Commission's asset health and risk modelling information notice, issued in writing to Transpower under section 53ZD(1) of the Commerce Act 1986 on [insert date]\*[except in the following respects:].

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

[Signature of director]

[Signature of director]

[Date]

\*Delete if inapplicable.



[Date] 2019

To: Transpower New Zealand Limited  
PO Box 1021  
WELLINGTON

**[DRAFT] Notice to supply information to the Commerce Commission under section 53ZD(1)(d), (e) and (f) of the Commerce Act 1986 – Customer consultation information**

*Background*

1. In our August 2019 decision and reasons paper for the individual price-quality path that will apply to Transpower New Zealand Limited (**Transpower**) from 1 April 2020, we (the Commerce Commission – the **Commission**) identified that we would issue an information request to **Transpower** under section 53ZD(1) of Commerce Act 1986 (the **Act**) to provide us with information regarding **customer** consultation.
2. We now require this information from **Transpower** under section 53ZD(1)(d), (e) and (f) of the **Act**, specifically:<sup>1</sup>
  - 2.1 under section 53ZD(1)(d) of the **Act**, to prepare and produce a customer engagement plan for **RCP3 (customer engagement plan)**;
  - 2.2 under section 53ZD(1)(e) of the **Act**, to supply information annually on the extent and effectiveness of its consultation in relation to how it intends to spend its **base capex** in each **disclosure year** of **RCP3 (consultation information)**;
  - 2.3 under section 53ZD(1)(e) of the **Act**, to produce an annual report each **disclosure year** of RCP3 on post-project reviews for **significant capex projects (post-project reviews)** (the **review report**);
  - 2.4 under section 53ZD(1)(f) of the **Act**, midway through **RCP3**, obtain and provide an opinion from an **independent expert** on its proposed customer engagement process leading up to its **RCP4** proposal (**expert opinion**); and

**Commented [TP1]:** We note that the high-level scope for the customer engagement plan is not mentioned in this list (although it is requested by cross-reference to Schedule A in clause 7).

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<sup>1</sup> Commerce Commission “Transpower’s individual price-quality path from 1 April 2020 – Decisions and reason paper” (29 August 2019), at [K7] to [K8].

2.5 under section 53ZD(1)(e) of the **Act**, to produce a report summarising the **post-interruption survey results** of affected **customers** to assist our investigation into the timeliness of **Transpower's** information provision following an **interruption (post-interruption survey report)**.<sup>2</sup>

3. The detailed requirements for the **customer engagement plan, consultation information, post-project reviews, expert opinion, and post-interruption survey results** are specified at Schedule A of this notice.
4. The information is to improve our understanding of **Transpower's customer** engagement during **RCP3** and to give us confidence in the evaluation process for **RCP4**.
5. We note that section 103 of the **Act** provides that no person shall:
  - 5.1 without reasonable excuse, refuse or fail to comply with a notice under section 53ZD of the **Act**;
  - 5.2 in purported compliance with such a notice, furnish information, or produce a document, or give evidence, knowing it to be false or misleading; or
  - 5.3 attempt to deceive or knowingly mislead the **Commission** in relation to any matter before it.
6. It is an offence to contravene section 103 of the **Act** and any person who does so is liable on summary conviction to a fine not exceeding \$100,000 in the case of an individual or \$300,000 in the case of a body corporate.

#### *Purpose of the Notice*

7. Under section 53ZD(1)(d), (e) and (f) of the **Act**, we require that **Transpower** provide us with the information specified in Schedule A.
8. We require this information to assist our function under section 53P of the **Act** of resetting of **Transpower's** individual price-quality path for **RCP4**. Specifically, the information on the effectiveness of **Transpower's customer** engagement, its consultation, and the information **Transpower** provides to **customers** following an **interruption** will help us to set an individual price-quality path that better incentivises **Transpower** to provide services at a quality that reflects consumer demands.

#### *Date, place and format of responses*

9. **Transpower** must supply its proposed high-level scope (**high-level scope**) for the **customer engagement plan** by 15 May 2020. The **Commission** will provide any comments to **Transpower** on the **high-level scope** by 1 July 2020.
10. **Transpower** must supply the **customer engagement plan** no later than 105 **working days** from the end of the final **disclosure year** of **RCP2**.

<sup>2</sup> Above n 1, at Table F2.

**Commented [TP2]:** Customer service measure CS1 in the draft IPP already requires the annual disclosure of post-interruption survey information (clause 25.1.5 of the draft IPP). This information should be required under either the IPP or the notice, not both.

If this is retained, "interruption" should be "unplanned interruption", consistent with clause A6.

"Post-interruption survey results" used in this clause and clause 3 is not defined.

**Commented [TP3]:** There is a somewhat inconsistent purpose statement in clause 8. There should only be one purpose statement.

- 11. Each **disclosure year** of RCP3, **Transpower** must supply the **consultation information** no later than 105 **working days** from the end of the **disclosure year** to which the **consultation information** relates.
- 12. **Transpower** must supply the **expert opinion** no later than 105 **working days** from the **disclosure year** ending 30 June 2022.
- 13. Each **disclosure year** of RCP3, **Transpower** must supply a **review report** on all **post-project reviews** completed no later than 105 **working days** from the end of the **disclosure year** to which the **review report** relates.
- 14. Each **disclosure year** of RCP3, **Transpower** must provide the **post-interruption survey report** no later than 105 **working days** from the end of the **disclosure year** to which the **post-interruption survey report** relates.
- 15. The **Commission** may, at its absolute discretion, on **Transpower's** application, grant **Transpower** an extension to the time limits set out in clauses 10 to 14 of this notice.
- 16. For the purposes of clause 15:
  - 16.1 where **Transpower** applies for an extension, its application must:
    - 16.1.1 explain why **Transpower** considers that an extension to the time limit is reasonably justified having regard to the circumstances; and
    - 16.1.2 be made no later than 15 **working days** before the applicable time limit is due to expire; and
  - 16.2 in circumstances where the **Commission** decides to grant **Transpower** an extension:
    - 16.2.1 the extension shall be effected by giving or posting notice of the extension to **Transpower**; and
    - 16.2.2 the notice effecting the extension must specify the period of the extension and the reasons for the extension.
- 17. **Transpower** must provide the **Commission** with the information required under this notice by either supplying the information directly to the **Commission**, or by making the information publicly available on **Transpower's** website, and by notifying the **Commission** that it has done so.
- 18. Where information must be supplied, or where notice must be given to the **Commission**, this must be done by no later than 4:30pm on the date specified.
- 19. Where **Transpower** is required to provide information to, or notify, the **Commission**, it must do so by email to [regulation.branch@comcom.govt.nz](mailto:regulation.branch@comcom.govt.nz) (Attention: Manager Price-Quality Regulation), with the subject line "Transpower- Response to section 53ZD Notice – Customer consultation: Issued November 2019".

**Commented [TP4]:** The RCP4 IPP will be determined in August 2024 (clause 2.2.2(1) of the Capex IM).

If the purpose of the information is to assist with setting the RCP4 IPP, we should not be required to provide the consultation information for the last disclosure year of RCP3 because by that stage the RCP4 IPP will already have been determined. It is likely the consultation information for the second-to-last disclosure year of RCP3 would also be provided too late.

**Commented [TP5]:** Our comment on clause 11 also applies to the review report for the last two disclosure years of RCP3.

**Commented [TP6]:** Our comment on clause 11 also applies to the post-interruption survey report for the last two disclosure years of RCP3.

**Commented [TP7]:** This clause should also apply to the time limit in clause 9 (for the high-level scope).

**Commented [TP8]:** We suggest this clause be expanded to allow **Transpower** to apply for an exemption as well as an extension, as is proposed for information to be disclosed under the IPP (clause 35 of the draft IPP). This will allow the notice requirements to be sensibly flexible if it transpires certain information cannot reasonably be provided or there is better information to meet the **Commission's** purpose than specified in the notice.

We suggest clauses 15 and 16 be redrafted as follows:

15. The **Commission** may, at its absolute discretion, on **Transpower's** application, grant **Transpower**:

15.1 an extension to the time limits set out in clauses 9 to 14 of this notice; or

15.2 an exemption from any of the information disclosure requirements of this notice.

16. For the purposes of clause 14:

16.1 where **Transpower** applies for an extension or exemption, its application must:

16.1.1 explain why **Transpower** considers that the extension or exemption is reasonably justified having regard to the circumstances;

16.1.2 in the case of an exemption, describe any alternative information **Transpower** proposes to disclose to meet the purpose of this notice; and

16.1.3 be made no later than 15 **working days** before the applicable time limit is due to expire; and

16.2 in circumstances where the **Commission** decides to grant **Transpower** an extension or exemption:

16.2.1 the extension or exemption shall be effected by giving or posting notice of the extension to **Transpower**;

16.2.2 a notice effecting an extension must specify the period of the extension and the reasons for the extension; and

16.2.3 a notice effecting an exemption must specify the scope of the exemption, any conditions of the exemption and the reasons for the exemption

*Directors' certificate*

20. Subject to clauses 15-16, for each **disclosure year** of RCP3, **Transpower** must provide to the **Commission** a **directors' certificate** in respect of the information required under this notice in the relevant **disclosure year**, no later than 105 **working days** from the end of the relevant **disclosure year**.
21. Clause 20 does not apply in respect of the **expert opinion** and the proposed **high-level scope**.
22. **Transpower** may combine the **directors' certificate** with the equivalent certification required for:
- 22.1 the **annual compliance statement**; and
- 22.2 the **Commission's** s 53ZD Notice – Requirements for asset health and risk modelling information: Issued November 2019.

**Commented [TP9]:** We seek that the Commission reconsiders the certification requirement; see our submission on the draft IPP and proposed notices.

*Interpretation*

23. Unless the context otherwise requires—
- 23.1 terms used in this notice that are defined in the **Transpower IM Determination**, the **Capex IM Determination**, or the **IPP determination**, but not in this notice have the meaning given in the **IM Determination**, **Capex IM Determination** or **IPP determination** as applicable;
- 23.2 a word which denotes the singular also denotes the plural and vice versa;
- 23.3 **annual compliance statement** has the meaning specified in the **IPP determination**;
- 23.4 **base capex** has the same meaning as defined in the **Capex IM Determination**;
- 23.5 **base capex project** has the same meaning as defined in the **Capex IM Determination**;
- 23.6 **Capex IM Determination** means *Transpower Capital Expenditure Input Methodology Determination* [2012] NZCC 2;
- 23.7 **consultation information** means the information required under clause A3 of Schedule A of this notice;
- 23.8 **customer** has the same meaning as defined in the **IPP determination**;
- 23.9 **customer engagement plan** means the plan required under clause A2 of Schedule A of this notice;
- 23.10 **directors' certificate** means a certificate signed by two directors of **Transpower** in respect of the information required under this notice, in the form specified at Schedule B of this notice, except that **Transpower** may modify the form in Schedule B to combine it with the equivalent certification for the **annual compliance statement** and the **Commission's** s 53ZD Notice – Requirements for asset health and risk modelling information: Issued November 2019;

**Commented [TP10]:** The revised draft IPP determination refers to the Transpower IM, but the Transpower IM does not have a definition for customer. **customer** is defined by our Information Disclosure Regulation



- 23.11 **disclosure year** has the same meaning as defined in the **Transpower IM Determination**;
- 23.12 **expert opinion** means the expert opinion required under clause A5 of Schedule A of this notice;
- 23.13 **high-level scope** means the scoping document (for the **customer engagement plan**) that meets the requirements of clause AA1 of Schedule A of this notice;
- 23.14 **independent expert** means a person who-
- 23.14.1 has no relationship with, or interest in, **Transpower** that is likely to involve a conflict of interest between his, her or its duties to **Transpower** and his, her or its duties to the **Commission**;
- 23.14.2 possesses expertise in the field of **customer** engagement; and
- 23.15 **interruption** has the same meaning as defined in the **IPP Determination**;
- 23.16 **IPP determination** means the *Transpower Individual Price-Quality Path Determination 2020* [2019] NZCC XX;
- 23.17 **listed project** has the same meaning as defined in the **Capex IM Determination**;
- 23.18 **major capex project** has the same meaning as defined in the **Capex IM Determination**;
- 23.19 **post-interruption survey report** means the report required under clause A6 of Schedule A of this notice;
- 23.20 **post-project review** means a review of a **significant capex project** which must include an assessment of the extent to which the **significant capex project** met the relevant measures of success established by **Transpower** prior to starting that **significant capex project**;
- 23.21 **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;
- 23.22 **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;
- 23.23 **RCP4** means the regulatory period following **RCP3**;
- 23.24 **significant capex project** means a capital expenditure project that required approval from **Transpower's** Board to proceed;
- 23.25 **Transpower IM Determination** means the *Transpower Input Methodologies Determination* [2012] NZCC 17;
- 23.26 **transmission alternative** has the same meaning as defined in the **Transpower IM Determination**;

Commented [TP11]: This should refer to the Capex IM.

23.27 **unplanned interruption** has the same meaning as defined in the **IPP determination**; and

23.28 **working days** is defined in the Commerce Act 1986.

*Use of supplied information and confidentiality*

24. If **Transpower** considers that, for confidentiality reasons, the **Commission** should not publish or publicly refer to any particular part of **Transpower's** response to this notice, **Transpower** must:

24.1 specify the relevant part of the response; and

24.2 give clear reasons why **Transpower** considers that part of the response is confidential.

25. If **Transpower** indicates that we should not publish or publicly refer to part of its response, we will discuss with **Transpower** before deciding whether or not to do so.

26. Where information is not publicly disclosed by **Transpower**, it must provide an unredacted version of the report to the **Commission** at the following email address: regulation.branch@comcom.govt.nz (Attention: Manager Price-Quality Regulation) at the same time the redacted version of the report is published on **Transpower's** website.

27. However, please note that all responses we receive, including any parts that we decide not to publish, can be requested under the Official Information Act 1982. This means, that if requested, we would be required to release material (whether published or not) unless good reason existed under the Official Information Act 1982 to withhold it. We would normally consult before releasing any material that **Transpower** requests not to be published.

Dated at Wellington: [XX XXXX] 2019

Signed by:

[XXXX]  
Commissioner

Commented [TP12]: Clause 17 makes publishing discretionary.

## Schedule A: Information required

*Transpower to produce high-level scope and customer engagement plan*

- A1 **Transpower** must produce a proposed **high-level scope** for a **customer engagement plan**, which identifies:
- A1.1 the business objective or objectives that are to be advanced;
  - A1.2 the **customer** communications/engagement objectives that support the business objectives;
  - A1.3 the success measures for each objective; and
  - A1.4 the expected timeframes and processes for the **customer** consultations **Transpower** intends to conduct during **RCP3**.
- A2 **Transpower** must produce a **customer engagement plan** that:
- A2.1 sets out how **Transpower** intends to:
    - A2.1.1 engage with **customers** on their preferences regarding price-quality trade-offs during **RCP3**; and
    - A2.1.2 take into account **customer** preferences in making asset management, planning and investment decisions during **RCP3**;
  - A2.2 explains the reasons for any material departures from:
    - A2.2.1 the **high-level scope**; and
    - A2.2.2 any feedback the **Commission** provides to **Transpower** on the **high-level scope**.

**Commented [TP13]:** "Take into account" is too high a standard. This should be "have regard to", consistent with the standard that generally applies to the Commission's evaluations (e.g. clause A1 of the Capex IM).

*Consultation information each disclosure year*

- A3 Each **disclosure year** of **RCP3**, **Transpower** must produce **consultation information** that includes:
- A3.1 whether and how **Transpower** consulted with **customers** and interested parties on how **Transpower** intends to spend its **base capex** in **RCP3**;
  - A3.2 what **base capex projects**, or aspects of a **base capex project**, in **RCP3**, **Transpower** consulted on;
  - A3.3 the extent of involvement in those consultations from providers of **transmission alternatives**;
  - A3.4 how effective **Transpower** considered the consultation was; and
  - A3.5 how satisfied **customers** and others were with the consultation processes, based on the feedback they provided.

*Review report on post-project reviews for significant capex projects*

- A4 Each **disclosure year**, **Transpower** must produce a **review report** that includes:
- A4.1 the measures of success for each **significant capex project** established by **Transpower** prior to starting work on that **significant capex project**; and
  - A4.2 an assessment of the extent to which each **significant capex project** met its measures of success.

*Transpower to obtain the expert opinion*

- A5 **Transpower** must obtain an **expert opinion** that:
- A5.1 assesses Transpower's proposed **customer** engagement processes leading up to the preparation and submission of its **RCP4** regulatory proposal; and
  - A5.2 sets out the qualifications, relating to **customer** engagement, of the **independent expert**, and how that **independent expert** meets the requirements in clause 23.13.

*Reporting summaries of post-interruption surveys within each disclosure year*

- A6 For each **interruption** in **RCP3**, **Transpower** must produce a **post-interruption survey report** that summarises:
- A6.1 the impact of **unplanned interruptions** on **customers** by reference to surveys undertaken of **customers** following **unplanned interruptions**;
  - A6.2 the information **Transpower** provided on **unplanned interruptions** to affected **customers**; and
  - A6.3 feedback from affected **customers** on the effectiveness of **Transpower's** communication on the **unplanned interruptions**.

**Commented [TP14]:** The post-interruption survey report is required for each disclosure year, not for each interruption. For clarity, "interruption" should be "unplanned interruption".

## Schedule B: Director Certification of Information

### Directors' Certificate

We, [insert full name of first director] and [insert full name of second director], being directors of Transpower New Zealand Limited (Transpower), certify that, having made all reasonable enquiry, to the best of our knowledge and belief, the attached information, dated [insert date], complies in all material respects with the requirements of the Commerce Commission's customer consultation information notice, issued in writing to Transpower under section 53ZD(1) of the Commerce Act 1986 on [insert date]\*[except in the following respects:].

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

[Signature of director]

[Signature of director]

[Date]

\*Delete if inapplicable.



[Date] 2019

To: Transpower New Zealand Limited  
PO Box 1021  
WELLINGTON

## **[DRAFT] Notice to supply information to the Commerce Commission under section 53ZD(1)(e) of the Commerce Act 1986 – Cost estimation information**

### *Background*

1. In our August 2019 decision and reasons paper for the individual price-quality path that will apply to Transpower New Zealand Limited (**Transpower**) from 1 April 2020, we (the Commerce Commission – the **Commission**) identified that we would issue an information request to **Transpower** under section 53ZD(1) of Commerce Act 1986 (the **Act**) to provide us with information on the variances between cost estimates in a proposal, those in **Transpower's** delivery business case, and the actual costs of **commissioned** projects.<sup>1</sup>
2. We now require this information from **Transpower** under section 53ZD(1)(e) of the **Act** to:
  - 2.1 enable us to investigate and assess the efficiency of **Transpower's** cost estimation process and systems over **RCP2** and **RCP3**; and
  - 2.2 assist our reset of **Transpower's** individual price-quality path for the **regulatory control period** following **RCP3**.
3. The information is to assist us in our cost estimation considerations for the **regulatory control period** following **RCP3**.
4. We note that section 103 of the **Act** provides that no person shall:
  - 4.1 without reasonable excuse, refuse or fail to comply with a notice under section 53ZD of the **Act**;
  - 4.2 in purported compliance with such a notice, furnish information, or produce a document, or give evidence, knowing it to be false or misleading; or
  - 4.3 attempt to deceive or knowingly mislead the **Commission** in relation to any matter before it.
5. It is an offence to contravene section 103 of the **Act** and any person who does so is liable on summary conviction to a fine not exceeding \$100,000 in the case of an individual or \$300,000 in the case of a body corporate.

**Commented [TP1]:** The notice should define "RCP4".

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<sup>1</sup> Commerce Commission "Transpower's individual price-quality path from 1 April 2020 – Decisions and reason paper" (29 August 2019), at [H31] to [H32].

*Purpose of the Notice*

- 6. Under section 53ZD(1)(e) of the **Act**, we require **Transpower** to provide us with the information specified in Schedule A.
- 7. We require the information to:
  - 7.1 enable the **Commission** to investigate and monitor the extent to which **Transpower** is improving the efficiency of its cost estimation process; and
  - 7.2 assist our reset under section 53P of the **Act** of **Transpower’s** individual price-quality path for the **regulatory control period** following **RCP3**.
- 8. The information will assist our reset of **Transpower’s** individual price-quality path by providing a clearer picture of **Transpower’s** actual costs that will comprise the individual price-quality path.

*Place, date and format of responses*

- 9. **Transpower** must produce the information specified in Schedule A and the certificate specified in Schedule B by:
  - 9.1 supplying the information and certification directly to the **Commission** by email to [regulation.branch@comcom.govt.nz](mailto:regulation.branch@comcom.govt.nz) (Attention: Manager Price-Quality Regulation), with the subject line “Transpower – Response to section 53ZD Notice – Cost estimation: Issued November 2019”); or
  - 9.2 making the information and certification publicly available on **Transpower’s** website, and notifying the **Commission** that it has done so, by no later than 4.30pm on the day that is 105 **working days** from the following dates:
    - 9.2.1 30 June 2020, in relation to the **completed capex programmes** completed in **RCP2**;
    - 9.2.2 30 June 2021, in relation of **completed capex projects** completed during the **disclosure year** 1 July 2020 to 30 June 2021;
    - 9.2.3 30 June 2022, in relation of **completed capex projects** completed during the **disclosure year** 1 July 2021 to 30 June 2022;
    - 9.2.4 30 June 2023, in relation of **completed capex projects** completed during the **disclosure year** 1 July 2022 to 30 June 2023;
    - 9.2.5 30 June 2024, in relation of **completed capex projects** completed during the **disclosure year** 1 July 2023 to 30 June 2024;
    - 9.2.6 30 June 2025, in relation of **completed capex projects** completed during the **disclosure year** 1 July 2024 to 30 June 2025; and
    - 9.2.7 30 June 2025, in relation to the **completed capex programmes** completed in **RCP3**.

**Commented [TP2]:** As drafted, the timing requirements in the subclauses of clause 9.2 do not apply to information we provide directly to the Commission, which we assume is unintended.

**Commented [TP3]:** It is unclear what “completed” means versus “commissioned”, and we note the terms are used interchangeably in this clause, clause 9.27 and clause A1.2.  
  
From our perspective we would not consider a project or programme to be “completed” until all costs for the project or programme have been finalised and attributed. Depending on the project or programme, that can be a very considerable period of time after commissioning. The result is that the cost estimation information may not be provided until a disclosure year after the project or programme has been commissioned.

**Commented [TP4]:** See our comment on clause 9.2.6 in relation to providing the information for the second-to-last disclosure year of RCP3.

**Commented [TP5]:** The RCP4 IPP will be determined in August 2024 (clause 2.2.2(1) of the Capex IM).

If the purpose of the information is to assist with setting the RCP4 IPP, we should not be required to provide the information for the last disclosure year of RCP3 because by that stage the RCP4 IPP will already have been determined. It is likely the consultation information for the second-to-last disclosure year of RCP3 would also be provided too late.

**Commented [TP6]:**  
Our comment on clause 9.2.6 also applies to this clause.

- 10. Narrative information is to be provided or published in Adobe PDF format. Numerical information is to be provided or published in electronic form in MS Excel file format.
- 11. The **Commission** may, at its absolute discretion, on **Transpower's** application, grant **Transpower** an extension to the time limits set out in clause 9.2 of this notice.
- 12. For the purposes of clause 11:
  - 12.1 where Transpower applies for an extension, its application must:
    - 12.1.1 explain why **Transpower** considers that an extension to the time limit is reasonably justified having regard to the circumstances; and
    - 12.1.2 be made no later than 15 **working days** before the applicable time limit is due to expire; and
  - 12.2 in circumstances where the **Commission** decides to grant **Transpower** an extension:
    - 12.2.1 the extension shall be effected by giving or posting notice of the extension to **Transpower**; and
    - 12.2.2 the notice effecting the extension must specify the period of the extension and the reasons for the extension.

*CEO's certificate*

- 13. Subject to clauses 11-12, for the last **disclosure year** of **RCP2** and for each **disclosure year** of **RCP3**, **Transpower** must provide to the **Commission** a **CEO's certificate** in respect of the information required under this notice in the relevant **disclosure year**, by the day that is 105 **working days** from the end of the relevant **disclosure year**.

*Interpretation*

- 14. In this notice, unless the context otherwise requires—
  - 14.1 terms used in this notice that are defined in the **Transpower IM Determination** or the **Capex IM Determination** but not in this notice have the meaning given in the **Transpower IM Determination** or **Capex IM Determination**, as applicable.
  - 14.2 financial items must be measured and disclosed in accordance with GAAP, unless otherwise required by this notice, the IM Determination or the **Capex IM Determination**.
  - 14.3 non-financial items must be measured and disclosed in accordance with standard industry practice unless otherwise required in this notice, the **Transpower IM Determination** or the **Capex IM Determination**.
  - 14.4 a word which denotes the singular also denotes the plural and vice versa.
  - 14.5 words in **bold** type have the following meanings:
    - 14.5.1 **base capex project** has the same meaning as defined in the **Capex IM Determination**;

**Commented [TP7]:** We suggest this clause be expanded to allow Transpower to apply for an exemption as well as an extension, as is proposed for information to be disclosed under the IPP (clause 35 of the draft IPP). This will allow the notice requirements to be flexible if it transpires certain information cannot reasonably be provided or there is better information to meet the Commission's purpose than specified in the notice.

We suggest clauses 13 and 14 be redrafted as follows:

**13. The Commission may, at its absolute discretion, on Transpower's application, grant Transpower:**

**13.1 an extension to the time limits set out in clauses 9, 10 and 11 of this notice; or**

**13.2 an exemption from any of the information disclosure requirements of this notice.**

**14. For the purposes of clause 13:**

**14.1 where Transpower applies for an extension or exemption, its application must:**

**14.1.1 explain why Transpower considers that the extension or exemption is reasonably justified having regard to the circumstances;**

**14.1.2 in the case of an exemption, describe any alternative information Transpower proposes to disclose to meet the purpose of this notice; and**

**14.1.3 be made no later than 15 working days before the applicable time limit is due to expire; and**

**14.2 in circumstances where the Commission decides to grant Transpower an extension or exemption:**

**14.2.1 the extension or exemption shall be effected by giving or posting notice of the extension to Transpower;**

**14.2.2 a notice effecting an extension must specify the period of the extension and the reasons for the extension; and**

**14.2.3 a notice effecting an exemption must specify the scope of the exemption, any conditions of the exemption and the reasons for the exemption.**

**Commented [TP8]:** No certification should be called for. Please refer to our submission letter



- 14.5.2 **base capex programme** has the same meaning as defined in the **Capex IM Determination**;
- 14.5.3 **Capex IM Determination** means *Transpower Capital Expenditure Input Methodology Determination [2012] NZCC 2*;
- 14.5.4 **CEO's certificate** means a certificate signed by the chief executive of **Transpower** in respect of the information required under this notice, in the form specified at Schedule B of this notice;
- 14.5.5 **commissioned** has the same meaning as defined in the **Transpower IM Determination**;
- 14.5.6 **completed capex project** means:
- (a) a **base capex project** (including **listed projects commissioned** in **RCP2** or in **RCP3**) completed in **RCP3**, for which the estimated cost was greater than \$5 million; or
  - (b) a **major capex project** completed in **RCP3**;
- 14.5.7 **completed capex programme** means a volumetric **base capex programme** where the estimated cost was greater than \$20 million over the relevant **regulatory control period**.
- 14.5.8 **delivery business case cost estimate** means, in relation to a **project**, the estimate of the cost included in **Transpower's** business case that was used to seek approval to proceed with the implementation and construction phases of that **project**;
- 14.5.9 **disclosure year** has the same meaning as defined in the **Transpower IM Determination**;
- 14.5.10 **listed project** has the same meaning as defined in the **Capex IM Determination**;
- 14.5.11 **major capex project** has the same meaning as defined in the **Capex IM Determination**;
- 14.5.12 **programme** has the same meaning as defined in the **Capex IM Determination**;
- 14.5.13 **project** has the same meaning as defined in the **Capex IM Determination**;
- 14.5.14 **proposal cost estimate** means, in relation to a **project**:
- (c) the expected cost **Transpower** initially proposed in its **RCP3** proposal for that **project** or **programme**;
  - (d) in its **listed project** application for that **project**; or
  - (e) in the **major capex proposal** for that project, whichever is relevant;

**Commented [TP9]:** Commissioned is a date in our financial system, but those costs will not be actual costs until sometime after commissioning. Which means that completion may not be in the same disclosure year as commissioning.

- 14.5.15 **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; and
- 14.5.16 **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; and
- 14.5.17 **regulatory control period** has the same meaning as defined in the **Transpower IM Determination**; and
- 14.5.18 **Transpower IM Determination** means *Transpower Input Methodologies Determination* [2012] NZCC 17.

*Use of supplied information and confidentiality*

15. If **Transpower** considers that, for confidentiality reasons, the **Commission** should not publish or publicly refer to any particular part of **Transpower's** response, **Transpower** must:
- 1.2 specify the relevant part of the information and provide it to the **Commission**; and
  - 1.3 give clear reasons why **Transpower** considers that part of the information is confidential.
16. If **Transpower** indicates that we should not publish or publicly refer to part of its response, we will discuss this with **Transpower** before deciding whether to do so.
17. Where information is not publicly disclosed by **Transpower**, it must provide an unredacted version of the information to the **Commission** at the following email address: regulation.branch@comcom.govt.nz (Attention: Manager Price-Quality Regulation) at the same time the redacted version of the report is published on **Transpower's** website.
18. Please note that all responses we receive, including any parts that we decide not to publish, can be requested from the **Commission** under the Official Information Act 1982. This means that, if requested, we would be required to release material (whether published or not) unless good reason existed under the Official Information Act 1982 to withhold it. We would normally consult before releasing any material that **Transpower** requests not to be published.

Dated at Wellington: [XX XXXX] 2019

Signed by:

[XXXX]  
Deputy Chair

Commented [TP10]: Clause 9 makes publishing discretionary.

## Schedule A: Information required

*Transpower is to produce information on variances between cost estimates in a proposal, those in the delivery business case, and the actual costs of commissioned projects.*

A1. **Transpower** must produce the following information:

A1.1 in relation to each **completed capex project** that is completed during **RCP3**:

A1.1.1 the variances between the cost estimate in the proposal document,<sup>2</sup> the **delivery business case cost estimate**, and the actual costs, for each **completed capex project** that is:

- (a) a **base capex project** included in **Transpower's** capital expenditure proposal for its **base capex** for **RCP3**, and for which assets were **commissioned** during **RCP3**;
- (b) a **listed project** for which assets were **commissioned** during **RCP2** or **RCP3**; or
- (c) a **major capex project** for which assets were **commissioned** during **RCP2** or **RCP3**.

A1.1.2 a print-out of **Transpower's** Enterprise Estimating **System** cost report for the **proposal cost estimate** and **delivery business case cost estimate** phases of each **completed capex project** included in A1.1.1(a) to (c) above; and

A1.1.3 where the variance for a **completed capex project** in A1.1.1(a) to (c) above, between the **proposal cost estimate** and the **delivery business case cost estimate**, exceeds 30%, a detailed narrative explaining the reasons for the cost **variance**.

A1.2 in relation to **completed capex programmes** for which assets were **commissioned** during **RCP2** or **RCP3**:

A1.2.1 the variance between the cost estimate of each **completed capex programme** in the applicable individual price-quality path proposal and the actual cost of the **completed capex programme** at the end of **RCP2** or at the end of **RCP3**;

A1.2.2 where the variance for a **completed capex programme** between the **completed capex programme's** cost estimate and the actual cost of the **completed capex programme** at the end of **RCP2** or at the end of **RCP3** is greater than 20%, a detailed narrative explaining the reasons for the cost variance.

**Commented [TP11]:** As above, 'Completed' means when all costs are in for a commissioned project. Actual cost information may be concluded later than the commissioning date and in a different disclosure year.

**Commented [TP12]:** We may change the system, so we suggest it is described generically rather than named

**Commented [TP13]:** Suggest "an explanation of the reasons for the cost variance."

This comment also applies to clause A1.2.2.

<sup>2</sup> 'Cost estimate in the proposal document' is the cost estimate included in the **base capex proposal** or in the **major capex** or **listed project** applications to the **Commission**, whichever is applicable to the **completed capex project**.

## Schedule B: Certification of Information

**Transpower** must provide the **Commission** with CEO certification for the information provided in response to this notice in the format set out below:

### CEO Certificate

I, [insert full name of CEO], being the Chief Executive Officer of Transpower New Zealand Limited (Transpower) certify that, having made all reasonable enquiry, to the best of my knowledge and belief, the attached information, dated [insert date], complies in all material respects with the Commerce Commission's cost estimation information requirements, which were issued by notice in writing to Transpower under section 53ZD of the Commerce Act 1986 on [insert date]\*[except in the following respects:].

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

[Signature of CEO]

[Date]

\*Delete if inapplicable.