

11 December 2019

To: Transpower New Zealand Limited  
Waikoukou  
22 Boulcott Street  
PO Box 1021  
Wellington

Attention: Alison Andrew  
Chief Executive

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

### *Background*

1. In our 29 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 of the Commerce Act 1986 (the **Act**) to provide us with information regarding its asset health and risk modelling.<sup>1</sup>
2. We require **Transpower**:
  - 2.1 under section 53ZD(1)(d)(i) of the **Act**, to provide a **development roadmap** by 25 November 2020 (ie, in the first **disclosure year** 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 Transpower’s proposal for its individual price-quality path for **RCP4**;
  - 2.2 under section 53ZD(1)(e)(i) of the **Act**, to provide a **progress update** following **disclosure year** 2022 of **RCP3** in accordance with the timeframe in clause 12, on its progress in developing asset health and risk models, asset life-extension models, and risk-based decision-making frameworks; and
  - 2.3 under section 53ZD(1)(f) of the **Act**, to obtain an **expert opinion** in accordance with the timeframe in clause 13, 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.

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

3. The specific requirements for the **development roadmap, progress update, and expert opinion** are set out in Attachment A of this notice.

*Offences under section 103 of the Act*

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.

*Purpose of the Notice*

6. 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 setting **Transpower's** individual price-quality path for each of **RCP4** and **RCP5**. In particular, our understanding of this will inform and assist our function under section 53ZC of the **Act** of assessing and resetting **Transpower's base capex, operating expenditure, and quality standards** for **RCP4**.
7. Modelling **Transpower's** risk at a **GXP** level will assist our understanding of **Transpower's** prioritisation of its **capex projects** and allow **Transpower** to more accurately target its **customer** engagement in respect of **capex projects** and **programmes**. Recent developments by the Electricity Authority on the area of benefit approach under the transmission pricing methodology means there is likely to be greater demand from **customers** and other stakeholders for this level of granularity of decision making and engagement with **Transpower**.
8. The **progress 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 over **RCP3** before **Transpower** submits to us its **base capex proposal** for **RCP4**. 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**.
9. For the purpose of section 53ZD(1)(e)(i) of the **Act**, the **progress update** is directly relevant to, and will assist, our investigation under section 53ZD(1)(b)(i) into the development path of **Transpower's** asset health modelling and risk understanding over **RCP3** in preparation for setting **Transpower's** individual price-quality path for each of **RCP4** and **RCP5**.

*Timeframes for responding to this notice*

10. **Transpower** must supply the **development roadmap** no later than 105 **working days** from the end of the final **disclosure year** of **RCP2**.

11. **Transpower** must prepare and provide proposed **terms of reference** for the **expert opinion** to the **Commission** by no later than 28 February 2021. **Transpower** must finalise the **terms of reference** by no later than 31 March 2021, taking into account any feedback the **Commission** provides **Transpower** on the proposed **terms of reference**.
12. **Transpower** must supply the **progress update** no later than 105 **working days** from the end of **disclosure year 2022**.
13. **Transpower** must supply the **expert opinion** no later than 105 **working days** from the end of **disclosure year 2022**.
14. Where information must be supplied to the **Commission** by a specific date, this must be done by no later than 4:30pm on that date.

*Variations, extensions and exemptions*

15. The **Commission** may, on **Transpower's** application, grant **Transpower** a variation to the information requirements set out in this notice to account for any practical limitations on **Transpower's** ability to provide the specified information at the specified time.
16. For the purposes of clause 15:
  - 16.1 if **Transpower** applies for a variation, its application must:
    - 16.1.1 be in writing;
    - 16.1.2 explain why **Transpower** considers that a variation to the information requirements is reasonably justified having regard to the circumstances; and
    - 16.1.3 be made no later than 15 **working days** before the applicable time limit is due to expire; and
  - 16.2 if the **Commission** decides to grant **Transpower** a variation, then:
    - 16.2.1 the approved form of the variation shall take effect by the **Commission** giving or posting written notice of the variation to **Transpower**; and
    - 16.2.2 the notice effecting the approved form of the variation must specify the reasons for the variation.
17. The **Commission** may, on **Transpower's** application, grant **Transpower** an extension to the timeframes set out in clauses 10, 11 and 12 of this notice.
18. For the purposes of clause 17:
  - 18.1 if **Transpower** applies for an extension, its application must:
    - 18.1.1 explain why **Transpower** considers that an extension to the time limit is reasonably justified having regard to the circumstances; and
    - 18.1.2 be made no later than 15 **working days** before the applicable time limit is due to expire; and

- 18.2 if the **Commission** decides to grant **Transpower** an extension, then:
- 18.2.1 the approved form of the extension shall take effect by the **Commission** giving or posting written notice of the extension to **Transpower**; and
- 18.2.2 the notice effecting the approved form of the extension must specify the period of the extension and the reasons for the extension.

19. The **Commission** may at any time, by way of written notice to **Transpower**:
- 19.1 exempt **Transpower** from any obligation in this notice, for a period of time and on such terms and conditions as the **Commission** specifies in the notice; and
- 19.2 amend or revoke any such exemption.

*Means of responding to this notice*

20. In accordance with the timeframes under clauses 10 to 13 of this notice, **Transpower** must produce and provide the **Commission** with the information required under this notice by either:
- 20.1 supplying the information directly to the **Commission**; or
- 20.2 making the information publicly available on **Transpower's** website, and notifying the **Commission** that it has done so.
21. Where **Transpower** is required to supply 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 – Asset health and risk modelling: Issued November 2019".
22. 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.

*Interpretation*

23. Unless the context otherwise requires—
- 23.1 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;
- 23.2 a word which denotes the singular also denotes the plural and vice versa;
- 23.3 **annual compliance statement** has the same meaning as defined in the **IPP determination**;
- 23.4 **base capex proposal** has the same meaning as defined in the **Capex IM Determination**;
- 23.5 **capex** 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, as amended;
- 23.7 **development roadmap** has the meaning set out at clause A1 of Attachment A of this notice;
- 23.8 **disclosure year** has the same meaning as defined in the **Transpower IM Determination**;<sup>2</sup>
- 23.9 **expert opinion** has the meaning set out at clause A3 of Attachment A of this notice;
- 23.10 **good electricity industry practice** has the meaning set out in the Electricity Industry Participation Code 2010;
- 23.11 **GXP** means grid exit point;
- 23.12 **grid output measure** has the same meaning as defined in the **Capex IM Determination**;
- 23.13 **HVDC** means high voltage direct current;
- 23.14 **independent expert** means a person or organisation that:
- 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**; and
- 23.14.2 possesses sufficient expertise in the fields of asset management, asset health and network risk modelling;
- 23.15 **IPP** means individual price-quality path;
- 23.16 **IPP determination** means the *Transpower Individual Price-Quality Path Determination 2020* [2019] NZCC 19;
- 23.17 **operating expenditure** has the same meaning as defined in the **Transpower IM Determination**;
- 23.18 **progress update** has the meaning set out at clause A4 of Attachment A of this notice;
- 23.19 **project** has the same meaning as defined in the **Capex IM Determination**;
- 23.20 **programme** has the same meaning as defined in the **Capex IM Determination**;
- 23.21 **quality standards** means the quality standards specified in Part 4 of the **IPP determination**;

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<sup>2</sup> **disclosure years** are identified by the year in which the **disclosure year** ends. For example, **disclosure year 2022** identifies the **disclosure year** from 1 July 2021 to 30 June 2022.

- 23.22 **RCP2** means the regulatory period from 1 April 2015 to 31 March 2020, provided that references to the final **disclosure year** in RCP2 means **disclosure year 2020**;
- 23.23 **RCP3** means the regulatory period from 1 April 2020 to 31 March 2025, provided that references to the final **disclosure year** in RCP3 means **disclosure year 2025**;
- 23.24 **RCP4** means the regulatory period following **RCP3**;
- 23.25 **RCP5** means the regulatory period following **RCP4**;
- 23.26 **terms of reference** means the terms for the provision of an **expert opinion** by an **independent expert**, as proposed and finalised under clause 11 of this notice;
- 23.27 **Transpower IM Determination** means the *Transpower Input Methodologies Determination* [2012] NZCC 17, as amended; and
- 23.28 **working days** has the meaning given 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 its response, **Transpower** must:
- 24.1 specify the relevant part of the information when providing the response to the **Commission**; 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, **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 either supplied to the **Commission** or published on **Transpower's** website, in accordance with clause 20 of this notice.
27. 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: 11 December 2019  
Signed by:

A handwritten signature in black ink, appearing to read "Sue Begg". The signature is written in a cursive style with a large initial 'S' and 'B'.

Sue Begg  
Deputy Chair

## Attachment A: Information required

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

- A1 Under section 53ZD(1)(d)(i) of the **Act**, **Transpower** must produce a **development roadmap** that identifies:
- A1.1 the asset classes for which **Transpower** plans to further develop asset health models and asset life-extension models in line with the **Commission’s RCP3** decision,<sup>3</sup> which may include:
    - A1.1.1 **HVDC** and dynamic reactive support assets: in particular, any development of 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;
    - A1.1.2 Static reactive support assets;
    - A1.1.3 Secondary assets – SA Protection, Battery Systems and Revenue Meters: continued implementation of asset life-extension modelling by further development of asset-centric health and criticality models; and
    - A1.1.4 Secondary assets – SA Substation Management Systems: implementation of asset life-extension modelling by developing asset 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 timeframe in which **Transpower** expects each model and framework would 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);
    - 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 **GXP**; and
    - A1.3.3 set forward-looking performance measures;

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<sup>3</sup> Commerce Commission “Transpower’s individual price-quality path from 1 April 2020 – Decisions and reasons paper” (29 August 2019).



- A1.4 key milestones for the process of developing the asset and network risk modelling; and
- A1.5 the timeframe in which **Transpower** expects to reach each milestone.

*Transpower to obtain an expert opinion on its progress*

- A2 Under section 53ZD(1)(f) of the **Act**, **Transpower** must:
  - A2.1 in accordance with clause 11 of this notice, prepare and provide **terms of reference**; and
  - A2.2 in accordance with clause A3 of this Schedule, obtain an **expert opinion**, having regard to the maturity of **Transpower's** further development of asset health models and asset life-extension models and the development of asset and network risk-based decision-making frameworks, including those identified under clauses A1.1 and A1.2, in **disclosure year 2022**.
- A3 The **expert opinion** must:
  - A3.1 give effect to, and be consistent with, the **terms of reference** finalised under clause 11 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**.

*Transpower to provide progress update on implementing the development roadmap*

- A4 Under section 53ZD(1)(e)(i) of the **Act**, **Transpower** must produce a **progress update** that sets out the following information:
  - A4.1 a statement of whether **Transpower** has 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**;

- 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 balance of **RCP3** 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 progress 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 have performed in each asset class, and in **disclosure years** 2021 and 2022 of **RCP3**, as if these asset health measures were revenue-linked as proposed by **Transpower** in its **base capex proposal** for **RCP3**;
- A4.5 information about how the **RCP3** asset health measures proposed in the **RCP3 base capex proposal** perform in each asset class, and in **disclosure years** 2021 and 2022 of **RCP3**, where the actual percentage of assets with an asset health index (**AHI**) of 8 or higher exceeds the collar value percentage of assets with an **AHI** of 8 or higher, 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 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 the information contained in clauses A4.3.1 to A4.3.3 in relation to the additional work described in clause A4.6.1.

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

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