

Section II Transmission agreements

1. Contents of section II

Section II deals with **transmission agreements**, and provides for:

- 1.1 a process for the **Board** to determine the structure of **transmission agreements**;
- 1.2 the categories of **participants** that must enter into **transmission agreements**;
- 1.3 an obligation on **Transpower** and **designated transmission customers** to enter into **transmission agreements**;
- 1.4 matters to be included in **transmission agreements**;
- 1.5 a process for the **Board** to determine **benchmark agreements** that:
 - 1.5.1 provide the basis for the negotiation of **transmission agreements**; or
 - 1.5.2 act as a **default transmission agreement** if **Transpower** and a **designated transmission party** fail to execute a **transmission agreement**;
- 1.6 a process for the **Board** to recommend the **Connection Code** to the Minister;
- 1.7 a process for variations in **transmission agreements** from **benchmark agreements**;
- 1.8 a process for resolving disputes arising from the negotiation of **transmission agreements**; and the application of the **benchmark agreement** as a **default transmission agreement**; and
- 1.9 existing agreements.

2. Structure of transmission agreements and participants required to enter into transmission agreements

2.1 Structure of transmission agreements

2.1.2 Board must propose an appropriate structure for transmission agreements

The **Board** must propose an appropriate structure for **transmission agreements** such as:

- 2.1.2.1 a single agreement that covers connection to and use of the **grid**; or
- 2.1.2.2 separate agreements for use of the **grid** and connection to the **grid**.

2.1.3 Board must publish proposed structure

2.1.3.1 The **Board** must **publish** its proposed structure as soon as reasonably practicable.

2.1.3.2 At the time the **Board publishes** its proposed structure, the **Board** must notify **registered participants** of the date by which submissions on the proposed structure are to be received by the **Board**. The date must be no earlier than **15 business days** from the date of **publication** of the proposed structure.

2.1.4 Submissions process

Every submission on the proposed structure must be made in writing to the **Board** and received on or before the **submission expiry date**. In addition to receiving written submissions, the **Board** may elect to hear one or more oral submissions.

2.1.5 Board to consider submissions and determine structure of transmission agreement

2.1.5.1 Within **20 business days** of the **submission expiry date** (or such longer period as the **Minister** may allow), the **Board** must complete its consideration of all submissions it receives and determine an appropriate **transmission agreement** structure.

2.1.5.2 The **transmission agreement** structure determined by the **Board** under this rule will be the structure of the **benchmark agreements** to be developed and approved by the **Board** under rule 4.

2.2 Categories of participants required to enter into transmission agreements

2.2.1 The categories of **designated transmission customers** required to enter into **transmission agreements** with **Transpower** under rule 3.1.1 are listed in schedule F1 to this section.

2.2.2 The **Board** must record in the **register** whether a **registered participant** is a **designated transmission customer**.

2.2.3 Registration has no effect on a **participant's** status as a **designated transmission customer**.

3. Transmission agreements

3.1 Transpower and designated transmission customers must enter transmission agreements

3.1.1 Obligation to enter transmission agreements

Transpower and designated transmission customers must enter into **transmission agreements**.

3.1.2 Board determines date on which benchmark agreement takes effect

3.1.2.1 The **Board** must determine the date on which the **benchmark agreement** will take effect as a default **transmission agreement** under rule 3.1.3, which must be at least 2 months after the later of the date:

- (a) on which the **benchmark agreement** is included in a schedule to this section, in accordance with rule 4.6;
- (b) on which the **Connection Code** is included in the **benchmark agreement**, in accordance with rule 3.3.9;
- (c) on which the information and the diagram referred to in rule 2.1 of section VI are included in schedules to that section, in accordance with rule 2.9 of section VI; and
- (d) on which the **Outage Protocol** is included in a schedule to section VII, in accordance with rule 13 of section VII.

3.1.2.2 The **Board** must **publish** the date determined under rule 3.1.2.1 as soon as reasonably practicable.

3.1.2.3 Any **participant** who becomes a **designated transmission customer** after the date determined under rule 3.1.2.1, is required to enter into a **transmission agreement** with **Transpower** within 2 months of becoming a **designated transmission customer**.

3.1.3 Benchmark agreements to be default transmission agreements

3.1.3.1 Subject to rule 8, the **benchmark agreement** will apply as a binding contract between **Transpower** and the **designated transmission customer** as a default **transmission agreement** in accordance with the procedure specified in this rule unless **Transpower** and that **designated transmission customer** have executed a

transmission agreement that is in force before the date determined under rule 3.1.2.1 (or rule 3.1.2.3 if applicable).

3.1.3.2 From the date on which the **transmission pricing methodology** is included in a schedule to section IV, in accordance with rule 8.4 of section IV (or the date determined under rule 3.1.2.3 if applicable), the following procedure applies:

- (a) within 10 business days, the **designated transmission customer** must provide **Transpower**, at the address for service for **Transpower** registered at the New Zealand Companies Office, with:
 - (1) the **designated transmission customer's** full name;
 - (2) the **designated transmission customer's** physical address, postal address and facsimile number to which notices under the default **transmission agreement** are to be sent; and
 - (3) the name of the contact person of the **designated transmission customer** to whom such notices should be addressed;
- (b) by the later of either 26 October 2007 or the date 20 business days after the receipt of the **designated transmission customer's** details under sub-paragraph (a), **Transpower** must provide the **designated transmission customer** with a draft default **transmission agreement** completed in accordance with the **benchmark agreement**, which must include:
 - (1) the **designated transmission customer's** details as provided under sub-paragraph (a);
 - (2) **Transpower's** physical address, postal address and facsimile number to which notices under the default **transmission agreement** are to be sent;
 - (3) the contact person to whom notices under the default **transmission agreement** should be addressed;

- (4) **Transpower's** designated bank account for the purposes of receiving payments under the default **transmission agreement**;
 - (5) a draft Schedule 1, which sets out the **connection locations, points of service and points of connection** of the **assets** owned or operated by the **designated transmission customer** to the **grid**;
 - (6) a draft Schedule 4 setting out, in the same form as the diagram in Schedule 4 of the **benchmark agreement**, the configuration of the **connection assets** in relation to each **connection location** listed in Schedule 1;
 - (7) a draft Schedule 5 setting out proposed service levels for each **connection location** listed in Schedule 1 determined in accordance with rule 3.1.3.3; and
 - (8) if applicable, a draft Schedule 6, including identifying the facilities, facilities area, and land that are to be subject to the access and occupation terms set out in that schedule and the licence charges under that schedule;
- (c) the **designated transmission customer** and **Transpower** may discuss the schedules proposed under sub-paragraphs (b)(5) to (8) above, as a result of which **Transpower** may amend any of the schedules; and
- (d) the **designated transmission customer** must advise **Transpower** in writing within 20 **business days** of receiving the draft default **transmission agreement** under sub-paragraph (b) above whether:
- (1) it accepts the schedules as proposed by **Transpower** under sub-paragraphs (b)(5) to (8) above; or
 - (2) if **Transpower** has amended any of those schedules under sub-paragraph (c) above, it accepts the schedules as amended.

- 3.1.3.3 The service levels to be set out in Schedule 5 of a default **transmission agreement** must be determined on the following basis:
- (a) the capacity service levels for each **branch** must be consistent with:
 - (1) the capacities of the **branch** or component **assets** in the most recent **asset capability statement** provided by **Transpower** under rule 2.5 of Technical Code A of schedule C3 of part C; or
 - (2) if the relevant information is not contained in the **asset capability statement**, the **manufacturer's specification** for the component **assets**;
 - (b) in addition to the requirements of sub-paragraph (a), the service levels for the voltage range specified in the capacity service measures for each **branch** must be consistent with:
 - (1) for **assets** of voltages of 50kV or above:
 - (A) the voltage ranges for the component **assets** specified in the **AOPOs**, if any; or
 - (B) the voltage range specified in any **equivalence arrangement** approved or any **dispensation** granted under rule 7 of section III of part C in respect of any **asset** that does not comply with the voltage range specified in the **AOPOs**; or
 - (2) for assets of voltages less than 50kV, the normal operating voltage of the component **assets**; or
 - (c) in addition to the requirements of sub-paragraphs (a) and (b), **Transpower** must ensure that each **connection asset** is included in a **branch**;
 - (d) the availability and reliability service levels must:
 - (1) be set at a level equivalent to the average annual availability and reliability at each **point of service** subject to the default **transmission agreement** over the five year period (being years ending 30

June) immediately prior to the date determined under rule 3.1.2.1 (or rule 3.1.2.3 if applicable); or

- (2) if a **point of service** subject to the default **transmission agreement** has not been in existence for five years (being years ending 30 June) prior to the date referred to in sub-paragraph (1) above, reflect a reasonable estimate of the expected availability and reliability at the **point of service** having regard to such performance data as is available for the **point of service** and average annual availability and reliability of **assets** similar to the **connection assets** at the **connection location** at which the **point of service** is located; and

- (e) the reporting and response service levels must be consistent with **Transpower's** practices existing on the date determined under rule 3.1.2.1 (or rule 3.1.2.3 if applicable), including **Transpower's** documented policies and procedures, and must not result in changes to the management or operation of the **grid** that could materially affect **Transpower** or any other **participant** or end use customer, or require **Transpower** to materially alter the level of its normal on-going **grid** expenditure.

3.1.3.4 If the **designated transmission customer** accepts the schedules as proposed by **Transpower** under sub-paragraphs (5) to (8) of rule 3.1.3.2(b), or as amended by **Transpower** under rule 3.1.3.2(c), the default **transmission agreement** will apply as a binding contract between **Transpower** and the **designated transmission customer** from the date determined under rule 3.1.2.1 (or rule 3.1.2.3 if applicable).

3.1.3.5 If **Transpower** and a **designated transmission customer** are unable to agree on the terms of any of the schedules to a default **transmission agreement** proposed by **Transpower** under sub-paragraphs (5) to (8) of rule 3.1.3.2(b), or as amended by **Transpower** under rule 3.1.3.2(c), either party may refer the matter to the **Rulings Panel** for determination under rule 6.

3.1.3.6 If a dispute has been referred to the **Rulings Panel**, under rule 3.1.3.5:

- (a) the default **transmission agreement** as determined by the **Rulings Panel** in accordance with rule 6 will apply as a binding agreement between **Transpower** and the **designated transmission customer** from the date determined under rule 3.1.2.1 (or rule 3.1.2.3 if applicable) or the date on which the **Rulings Panel** makes its determination or its determination comes into effect, whichever is later; and
- (b) if the **Rulings Panel** has not made a determination by the date determined under rule 3.1.2.1 (or rule 3.1.2.3 if applicable), the draft default **transmission agreement** provided under rule 3.1.3.2(b) will apply as a binding agreement between **Transpower** and the **designated transmission customer** until the date on which the **Rulings Panel** makes its determination or the determination comes into effect.

3.1.4 Subsequent transmission agreements

Where a **benchmark agreement** applies as a default **transmission agreement**, the **benchmark agreement** may always be superseded by a subsequent **transmission agreement** entered into by **Transpower** and the **designated transmission customer**.

3.1.5 Changes to connection assets under default transmission agreements

3.1.5.1 If **Transpower** reconfigures, replaces, enhances, or permanently removes a **connection asset** from service in accordance with the provisions of a default **transmission agreement** that applies under rules 3.1.3 or 3.1.6:

- (a) within 20 **business days**, to the extent necessary, **Transpower** must provide the **designated transmission customer** who is a party to that agreement with a revised Schedule 1, a revised Schedule 4, and a revised Schedule 5 for that agreement, reflecting any changes to the description of the **connection locations, points of service, or points of connection** in Schedule 1, the diagram in Schedule 4, or to the service levels specified in

Schedule 5 resulting from the replacement or enhancement of the **connection asset**;

- (b) the **designated transmission customer** and **Transpower** may discuss the revised schedules, as a result of which **Transpower** may amend any of the revised schedules;
- (c) the **designated transmission customer** must advise **Transpower** within 20 **business days** of receiving the revised schedules under sub-paragraph (a) above whether:
 - (1) it accepts the revised schedules as proposed by **Transpower** under sub-paragraph (a) above; or
 - (2) if **Transpower** has amended any of those revised schedules under sub-paragraph (b) above, it accepts the revised schedules as amended; and
- (d) the revised schedules apply under the default **transmission agreement** from the date that **acceptance** is received by **Transpower** under sub-paragraph (c) above.

3.1.5.2 In the event that the **designated transmission customer** does not accept the revised schedules under rule 3.1.5.1(c), either party may refer the matter to the **Rulings Panel** for determination under rule 6.

3.1.5.3 If a dispute is referred to the **Rulings Panel** in accordance with rule 3.1.5.2:

- (a) the revised schedules proposed by **Transpower** under rule 3.1.5.1(a) shall apply from the date on which **Transpower** provides the **designated transmission customer** with those revised schedules under rule 3.1.5.1(a) until the date on which the **Rulings Panel** makes its determination or the determination comes into effect; and
- (b) the revised schedules as determined by the **Rulings Panel** under rule 6 will apply under the default **transmission agreement** from the date determined by the **Rulings Panel**.

3.1.6 Expiry or termination of transmission agreements

If a **transmission agreement**, or an existing written agreement to which rule 8.1 applies, expires or terminates on or after the date determined under rule 3.1.2.1 (or rule 3.1.2.3 if applicable) and **Transpower** and the **designated transmission customer** do not enter into a new **transmission agreement** within two months of that date, the following procedure applies:

3.1.6.1 within 10 **business days**, the **designated transmission customer** must provide **Transpower**, at the address for service for **Transpower** registered at the New Zealand Companies Office, with:

- (a) the **designated transmission customer's** full name;
- (b) the **designated transmission customer's** physical address, postal address and facsimile number to which notices under the default **transmission agreement** are to be sent; and
- (c) the name of the contact person of the **designated transmission customer** to whom such notices should be addressed;

3.1.6.2 within 20 business days of receipt of the **designated transmission customer's** details under rule 3.1.6.1, **Transpower** must provide the **designated transmission customer** with a draft default **transmission agreement** completed in accordance with the **benchmark agreement**, which must include:

- (a) the **designated transmission customer's** details as provided under rule 3.1.6.1;
- (b) **Transpower's** physical address, postal address and facsimile number to which notices under the default **transmission agreement** are to be sent;
- (c) the contact person to whom notices under the default **transmission agreement** should be addressed;
- (d) **Transpower's** designated bank account for the purposes of receiving payments under the default **transmission agreement**;

- (e) a draft Schedule 1, which sets out the **connection locations, points of service and points of connection** of the **assets** owned or operated by the **designated transmission customer** to the **grid**;
 - (f) a draft Schedule 4 setting out, in the same form as the diagram in Schedule 4 of the **benchmark agreement**, the configuration of the **connection assets** in relation to each **connection location** listed in Schedule 1;
 - (g) a draft Schedule 5 setting out proposed service levels for each **connection location** listed in Schedule 1 determined in accordance with rule 3.1.3.3; and
 - (h) if applicable, a draft Schedule 6, including identifying the facilities, facilities area, and land that are to be subject to the access and occupation terms set out in that schedule and the licence charges under that schedule;
- 3.1.6.3 the **designated transmission customer** and **Transpower** may discuss the schedules proposed under sub-paragraphs (e) to (h) of rule 3.1.6.2, as a result of which **Transpower** may amend any of the schedules;
- 3.1.6.4 the **designated transmission customer** must advise **Transpower** in writing within 20 **business days** of receiving the draft default **transmission agreement** under rule 3.1.6.2 above whether:
- (a) it accepts the schedules as proposed by **Transpower** under sub-paragraphs (e) to (h) of rule 3.1.6.2; or
 - (b) if **Transpower** has amended any of those schedules under rule 3.1.6.3 above, it accepts the schedules as amended;
- 3.1.6.5 if the **designated transmission customer** accepts the schedules as proposed by **Transpower** under sub-paragraphs (e) to (h) of rule 3.1.6.2, or as amended by **Transpower** under rule 3.1.6.3, the default **transmission agreement** applies as a binding contract between **Transpower** and the **designated transmission customer**, effective from the date on which the previous **transmission**

agreement or existing written agreement to which rule 8.1 applies expired;

3.1.6.6 if **Transpower** and a **designated transmission customer** are unable to agree on the terms of any of the schedules to a default **transmission agreement** proposed by **Transpower** under sub-paragraphs (e) to (h) of rule 3.1.6.2, or as amended by **Transpower** under rule 3.1.6.3, either party may refer the matter to the **Rulings Panel** for determination under rule 6; and

3.1.6.7 where a dispute has been referred to the **Rulings Panel** in accordance with rule 3.1.6.6:

(a) the draft default **transmission agreement** provided under rule 3.1.6.2 applies as a binding agreement between **Transpower** and the **designated transmission customer**, effective from the date on which the previous **transmission agreement** or existing written agreement to which rule 8.1 applies expired, until the date on which the **Rulings Panel** makes its determination or the determination comes into effect; and

(b) the default **transmission agreement** as determined by the **Rulings Panel** in accordance with rule 6 will apply as a binding agreement between **Transpower** and the **designated transmission customer** from the date determined by the **Rulings Panel**.

3.1.7 **Transition to separate reporting on reliability of connection and interconnection assets**

3.1.7.1 Within twelve months of this rule coming into force, **Transpower** must provide each **designated transmission customer** who is a party to a default **transmission agreement** in accordance with rule 3.1.3.1 with a revised clause 37 and a revised Schedule 5 in the same form as the default clause 37 and Schedule 5 set out in schedule F2A to this section. The service levels in the revised Schedule 5 are to be determined in accordance with rule 3.1.3.3.

3.1.7.2 After **Transpower** provides the information under rule 3.1.7.1 to a **designated transmission customer**, the following procedure applies:

- (a) the **designated transmission customer** and **Transpower** may discuss the revised Schedule 5, as a result of which **Transpower** may amend the revised schedule that was proposed under rule 3.1.7.1;
- (b) the **designated transmission customer** must advise **Transpower** within 20 **business days** of receiving the revised Schedule 5 under rule 3.1.7.1 whether:
 - (1) it accepts the revised Schedule 5 as proposed by **Transpower** under rule 3.1.7.1; or
 - (2) if **Transpower** has amended the revised Schedule 5 under subparagraph (a) above, it accepts the revised schedule as amended; and
- (c) if the **designated transmission customer** accepts the revised Schedule 5 in accordance with sub-paragraph (b) above, the revised clause 37 and the revised Schedule 5 apply under the default **transmission agreement** from 1 April 2009.

3.1.7.3 In the event that the **designated transmission customer** does not accept the revised Schedule 5 under rule 3.1.7.2(b), either party may refer the matter to the **Rulings Panel** for determination under rule 6.

3.1.7.4 If a dispute is referred to the **Rulings Panel** in accordance with rule 3.1.7.3, and the dispute is not resolved before 1 April 2009:

- (a) the revised clause 37 and revised Schedule 5 provided by **Transpower** under rule 3.1.7.1 shall apply from 1 April 2009 until the date on which the **Rulings Panel** makes its determination or the determination comes into effect; and
- (b) the revised Schedule 5 as determined by the **Rulings Panel** under rule 6 will apply under the default **transmission agreement** from the date determined by the **Rulings Panel**.

3.1.7.5 On the date twelve months after this rule comes into force, the revised clause 37 and Schedule 5 for the **benchmark agreement** set out in Schedule F2A of this section shall replace clause 37 and Schedule 5 of the **benchmark**

agreement that was added as Schedule F2 of this section on 28 June 2006.

3.2 Content of transmission agreements

3.2.1 Transmission agreements to be consistent with benchmark agreements and grid reliability standards

Subject to rules 5.1 to 5.4, any **transmission agreement** entered into between **Transpower** and a **designated transmission customer** under rule 3.1.1 must be consistent in all material respects with:

3.2.1.1 the **benchmark agreement** specified in a schedule to this section in accordance with rule 4.6; and

3.2.1.2 the **grid reliability standards**,

as at the date the **transmission agreement** is entered into.

3.2.2 All transmission agreements to be provided to the Board and published

3.2.2.1 **Transpower** must provide the **Board** with a copy of any **transmission agreement** executed by it as soon as reasonably practicable;

3.2.2.2 The copy that is provided must be:

- a copy of the complete **transmission agreement**;
- certified by a director or the chief executive of **Transpower** or the **designated transmission customer**, to the best of the director's or chief executive's knowledge and belief, to be a true and complete copy of the agreement.

3.2.2.3 The **Board** must **publish** all **transmission agreements** between **Transpower** and **designated transmission customers** within a reasonable time of their receipt.

3.3 Connection Code

3.3.1 Purpose of Connection Code

The purpose of the **Connection Code** is to set out the technical requirements and standards that **designated transmission customers** must meet in order to be connected to the **grid** and that **Transpower** must comply with. **Transpower** and **designated transmission customers** are required to comply with the **Connection Code** under default **transmission agreements** that apply under rules 3.1.3 or 3.1.6.

3.3.2 Transpower to submit Connection Code

3.3.2.1 **Transpower** must submit a proposed **Connection Code** to the **Board** within 90 **days** (or such longer period as the **Board** may allow) of receipt of a written request from the **Board**. The **Board** may issue such a request at any time. The proposed **Connection Code** must provide for the matters set out in rule 3.3.3 and give effect to the principles set out in rule 3.3.4.

3.3.2.2 With its proposed **Connection Code**, **Transpower** must submit to the **Board** an explanation of the proposed **Connection Code** and a statement of proposal for the proposed **Connection Code**, prepared as if the **Board** were recommending the **Connection Code** as proposed by **Transpower** to the **Minister** in accordance with section 172F of the **Act**.

3.3.3 Required content of Connection Code

The **Connection Code** must provide for the following matters:

3.3.3.1 The **Connection Code** must set out connection requirements for **designated transmission customers**.

3.3.3.2 The **Connection Code** must set out technical requirements for **assets**, including **assets** owned by **Transpower**, and for other equipment and plant that is connected to a **local network** or an **embedded network** or that forms part of an **embedded network** or **embedded generating station** where the operation of that equipment and plant could affect the **grid assets**.

- 3.3.3.3 The **Connection Code** must include operating standards for equipment that is owned by a **designated transmission customer**, used in connection with the conveyance of **electricity**, and that is situated on land owned by **Transpower**.
- 3.3.3.4 The **Connection Code** must set out information requirements to be met by **designated transmission customers** prior to equipment being connected to the **grid** and before changes are made to any such equipment.
- 3.3.3.5 The **Connection Code** must include an obligation on **Transpower** to provide a ten **year** forecast of the expected maximum fault level of each point of service to **designated transmission customers** set out in the **transmission agreement** between **Transpower** and each **designated transmission customer**.

3.3.4 Principles for developing Connection Code

The **Connection Code** must give effect to the following principles:

- 3.3.4.1 the principles of the **benchmark agreement** in rule 4.2;
- 3.3.4.2 the desirability of the **Connection Code** and part C operating in an integrated and consistent manner, where possible;
- 3.3.4.3 the need to ensure that the **grid owner** can meet all obligations placed on it by the **system operator** for the purpose of meeting common security and power quality requirements under part C;
- 3.3.4.4 the need to ensure that the safety of all personnel is maintained; and
- 3.3.4.5 the need to ensure that the safety and integrity of equipment is maintained.

3.3.5 Board may initially approve proposed Connection Code or refer back to Transpower

After consideration of **Transpower's** proposed **Connection Code**, and accompanying explanation and statement of proposal, the **Board** may either:

- 3.3.5.1 provisionally approve the proposed **Connection Code** having regard to the matters set out in rule 3.3.3 and the principles in rule 3.3.4; or
- 3.3.5.2 refer the proposed **Connection Code** and accompanying explanation and statement of proposal back to **Transpower** if, in the **Board's** view:
- (a) the proposed **Connection Code** does not contain the matters set out in rule 3.3.3;
 - (b) the proposed **Connection Code** does not adequately provide for the principles in rule 3.3.4; or
 - (c) the explanation or statement of proposal provided with the proposed **Connection Code** in accordance with rule 3.3.2.2 is inadequate,

and **Transpower** will have 20 **business days** (or such longer period as the **Board** may allow) to consider the **Board's** concerns and to resubmit its proposed **Connection Code** and accompanying explanation and statement of proposal for consideration by the **Board**.

3.3.6 Amendment of proposed Connection Code by the Board

If the **Board** considers that the **Connection Code** resubmitted by **Transpower** under rule 3.3.5.2 does not adequately provide for the matters set out in rule 3.3.3 or adequately give effect to the principles in rule 3.3.4, the **Board** may make any amendments to the proposed **Connection Code** it considers necessary.

3.3.7 Board must consult on the proposed Connection Code

The **Board** must **publish** the proposed **Connection Code**, either as provisionally approved by the **Board** or as amended by the **Board**, as soon as practicable, for consultation with any person that the **Board** thinks is likely to be materially affected by the proposed **Connection Code**.

3.3.8 Board may undertake additional consultation

As well as the consultation required under rule 3.3.7, the **Board** may undertake any other consultation it considers necessary.

3.3.9 Board to make recommendations to Minister

When the **Board** has completed its consultation on the proposed **Connection Code** it must make recommendations to the **Minister** for inclusion of the **Connection Code** as a schedule to this section.

3.3.10 Review of Connection Code

The **Board** may review the **Connection Code** at any time.
Rules 3.3.2 to 3.3.9 apply to any such review, with any necessary modifications.

4. Benchmark agreements for connection to and/or use of the grid

4.1 Purpose of benchmark agreements

The purpose of **benchmark agreements** is to:

- 4.1.1 facilitate commercial arrangements between **Transpower** and **designated transmission customers** by providing a basis for negotiating **transmission agreements** required under rule 3.1.1 that meet the particular requirements of **Transpower** and **designated transmission customers**; and
- 4.1.2 act as a default **transmission agreement** in the event that **Transpower** and a **designated transmission customer** fail to enter into a **transmission agreement** by the date required by the **Board** under rule 3.1.2.

4.2 Principles for benchmark agreements

Benchmark agreements should:

- 4.2.1 reflect a fair and reasonable balance between the requirements of **designated transmission customers** and the legitimate interests of **Transpower** as **asset owner**;
- 4.2.2 reflect the interests of end use customers;
- 4.2.3 reflect the reasonable requirements of **designated transmission customers** at the **grid injection points** and **grid exit points**, and the ability of **Transpower** to meet those requirements;
- 4.2.4 reflect the differing needs of different classes of **designated transmission customers**;
- 4.2.5 be appropriate to the technical requirements of services provided at the **point of connection** to the **grid**, but not duplicate requirements that are more appropriately included in the **grid reliability standards**;

- 4.2.6 establish common standards for a common configuration based on factors such as size of connection and voltage level;
- 4.2.7 encourage efficient and effective processes for enforcement of obligations and dispute resolution.

4.3 Contents of benchmark agreements

4.3.1 **Benchmark agreements** must include:

- 4.3.1.1 an obligation on the parties to design, construct, maintain and operate all relevant plant and equipment in accordance with:
 - relevant laws;
 - the requirements of these rules (including obligations on **designated transmission customers** to provide information to facilitate system planning, as set out in rule 3 of section III); and
 - **good electricity industry practice** and applicable New Zealand technical and safety standards,
- 4.3.1.2 an obligation on **designated transmission customers** to comply with **Transpower's** reasonable technical connection and safety requirements;
- 4.3.1.3 an obligation on **designated transmission customers** to pay prices calculated in accordance with the application of the **transmission pricing methodology** approved by the **Board** under section IV;
- 4.3.1.4 arbitration or mediation processes for resolving disputes; and
- 4.3.1.5 **service definitions, service levels, and service measures** to the extent practicable for transmission services, other than the services to which the rules in section VI apply.

4.3.2 **Grid reliability standards**

Benchmark agreements must be consistent in all material respects with the **grid reliability standards**.

4.4 Board must publish draft benchmark agreements

- 4.4.1 The **Board** must **publish** draft **benchmark agreements** as soon as reasonably practicable.
- 4.4.2 At the time the **Board publishes** a draft **benchmark agreement** the **Board** must notify **registered participants** of the date by which submissions on the draft **benchmark agreement** are to be received by the **Board**. The date must be no earlier than 15 **business days** from the date of **publication** of the draft **benchmark agreement**.

4.5 Submissions process

Every submission on the draft **benchmark agreements** must be made in writing to the **Board** and received on or before the **submission expiry date**. In addition to receiving written submissions, the **Board** may elect to hear one or more oral submissions.

4.6 Board to consider submissions and make recommendations to Minister

Within 20 **business days** of the **submission expiry date** (or such longer period as the **Minister** may allow), the **Board** must complete its consideration of all submissions it receives on the draft **benchmark agreement** and make recommendations to the **Minister** for inclusion of the **benchmark agreement** in a schedule to this section, in accordance with the **Act**.

5. Variations from benchmark agreements and grid reliability standards and enhancement and removal of connection assets

5.1 Increased services and reliability

- 5.1.1 This rule 5.1 applies if:
- 5.1.1.1 a proposed **transmission agreement** is not consistent in all material respects with the **benchmark agreement** because it increases the services above those that would apply if the **benchmark agreement** applied in accordance with rules 3.1.3 or 3.1.6; or
 - 5.1.1.2 subject to rule 5.5, a proposed **transmission agreement** or other agreement between **Transpower** and a **designated transmission customer** increases the level of reliability above the **grid reliability standards** for a particular **grid injection point** or **grid exit point**.
- 5.1.2 If this rule 5.1 applies, the parties must certify in writing to the **Board** that they have consulted with affected end use customers in relation to the proposed service levels or the proposed increase in reliability, and any resulting price implications, and that there are no material unresolved issues affecting the interests of those end use customers.

5.2 Decreased services and reliability

5.2.1 This rule 5.2 applies if:

5.2.1.1 a proposed **transmission agreement** is not consistent in all material respects with the **benchmark agreement** because it decreases the services below those that would apply if the **benchmark agreement** applied in accordance with rule 3.1.3 or 3.1.6; or

5.2.1.2 subject to rule 5.5, a proposed **transmission agreement** or other agreement between **Transpower** and a **designated transmission customer** decreases the level of reliability below the **grid reliability standards** for a particular **grid injection point** or **grid exit point**.

5.2.2 If this rule 5.2 applies, the parties must obtain **Board** approval of the proposed service levels or the lower level of reliability.

5.2.3 The parties must satisfy the **Board** that it should grant approval under rule 5.2.2, having regard to any potential material adverse impacts of the proposed service levels or the lower level of reliability on:

5.2.3.1 current and future service levels or reliability for any affected **designated transmission customers** and end use customers; and

5.2.3.2 the price paid for transmission or distribution services, or **electricity**, by any affected **designated transmission customers** and end use customers.

5.3 Variations that may increase or decrease reliability

If it is uncertain whether, subject to rule 5.5, a proposed **transmission agreement** or other agreement increases or decreases the service levels from those that would apply if the **benchmark agreement** applied, or whether a proposed **transmission agreement** or other agreement increases or decreases the level of reliability above or below the **grid reliability standards**, for a particular **grid injection point** or **grid exit point**, the parties must obtain the **Board** approval described in rule 5.2.2.

5.4 Other variations from terms of benchmark agreements

5.4.1 This rule 5.4 applies if a proposed **transmission agreement** to be entered into by **Transpower** and a **designated transmission customer** under rule 3.1.1 is not consistent in all material aspects with the **benchmark agreement**, other than a situation to which rules 5.1 to 5.3 apply.

5.4.2 If this rule applies, the parties must obtain **Board** approval to the proposed variation from the **benchmark agreement**. The parties to the proposed **transmission agreement** must satisfy the **Board** that they have consulted with any affected end use customers and **designated transmission customers** in relation to the proposed

variation, and there are no material unresolved issues affecting the interests of those persons.

5.5 Customer specific value of unserved energy

- 5.5.1 **Transpower** or a **designated transmission customer** may apply to the **Board**:
- 5.5.1.1 where permitted under a **transmission agreement**, for provisional approval to use a different value of unserved energy than that specified under clauses 8.3.4 and 8.4.3 of Schedule F4 of section III for the purposes of determining whether to replace or enhance **connection assets** as provided for under that **transmission agreement**: or
- 5.5.1.2 for approval to use a different value of unserved energy than that specified under clauses 8.3.4 and 8.4.3 of Schedule F4 of section III for the purposes of applying the **grid reliability standards** under rules 5.1 to 5.3 for a **grid injection point** or **grid exit point**, regardless of whether **Transpower** or the **designated transmission customer** has applied for the **Board's** provisional approval under rule 5.5.3.
- 5.5.2 An application under rule 5.5.1 must be made in writing to the Board:
- 5.5.2.1 in the case of an application under rule 5.5.1.1, within 20 **business days** of the **designated transmission customer** proposing that different value to **Transpower** under the **transmission agreement**; and
- 5.5.2.2 in the case of an application under rule 5.5.1.2, within 20 **business days** of the **designated transmission customer** reaching an agreement with **Transpower** to which rules 5.1 to 5.3 apply.
- 5.5.3 If **Transpower** or a **designated transmission customer** apply for approval of a different value of unserved energy under rule 5.5.1.1, the **Board** may provisionally approve that value if it considers the value is a reasonable estimate of the value of unserved energy in respect of that **grid injection point** or **grid exit point** for the **designated transmission customer** concerned.
- 5.5.4 If **Transpower** or a **designated transmission customer** applies for approval of a different value of unserved energy under rule 5.5.1.2 the **Board**:

- 5.5.4.1 may approve that value if it considers the value is a reasonable estimate of the value of unserved energy in respect of that **grid injection point** or **grid exit point** for the **designated transmission customer** concerned; and
- 5.5.4.2 may decline to approve that value despite having provisionally approved that value under clause 5.5.3.
- 5.5.5 If the **Board** approves the value of unserved energy proposed by **Transpower** or the **designated transmission customer** under rule 5.5.1.2, that value of unserved energy will apply for the purposes of applying the **grid reliability standards** under rules 5.1 to 5.3 for the **grid injection point** or **grid exit point** instead of the value of unserved energy specified under clauses 8.3.4 and 8.4.3 of Schedule F4 of section III.
- 5.5.6 If the **Board** does not approve the value of unserved energy proposed by **Transpower** or the **designated transmission customer** under rule 5.5.1.2, the value of unserved energy under clauses 8.3.4 and 8.4.3 of Schedule F4 of section II will apply for the purposes of applying the **grid reliability standards** under rules 5.1 to 5.3 for the **grid injection point** or **grid exit point**.

5.6 Replacement and enhancement of shared connection assets

- 5.6.1 If two or more **designated transmission customers** are connected to a **point of connection** and **Transpower** has notified those **designated transmission customers**, in accordance with the provisions of a **transmission agreement** between **Transpower** and each of those **designated transmission customers**, that a **grid reliability report published by Transpower** in accordance with rule 12A of section III sets out that the power system is not reasonably expected to meet the **N-1 criterion** at all times over the next five years because of a **connection asset** related to that **point of connection**, **Transpower** must:
 - 5.6.1.1 as soon as practicable after notifying the **designated transmission customers**, investigate whether the **connection asset** meets the **grid reliability standards**;
 - 5.6.1.2 if it finds that the **connection asset** does not meet the **grid reliability standards**, develop proposals for investment in the **grid** to ensure that the **connection asset** meets the **grid reliability standards** and propose them to the **designated transmission customers** as soon as reasonably possible after publication of the **grid reliability report**.
- 5.6.2 **Transpower** and the **designated transmission customers** notified under rule 5.6.1 must attempt in good faith, within six months of the date on which **Transpower** makes its proposals to the **designated transmission customers** under rule 5.6.1.2, or such

longer period as the **Board** may allow, to reach an agreement for an investment or other solution that will have the effect of:

- 5.6.2.1 maintaining the level of reliability for the **connection asset** at the level of reliability in the **grid reliability standards**; or
 - 5.6.2.2 increasing or decreasing the level of reliability for the **connection asset** above or below the **grid reliability standards**, so long as **Transpower** and the **designated transmission customers** have complied with rules 5.1 to 5.3, and 5.5.
- 5.6.3 **Transpower** may only undertake an investment proposed under rule 5.6.2:
- 5.6.3.1 if the **designated transmission customers** unanimously agree with the proposal in accordance with rule 5.6.2; or
 - 5.6.3.2 where the **designated transmission customers** do not unanimously agree or none of the **designated transmission customers** agree with the proposal, if the investment is approved by the **Board** as a **reliability investment**, under a **grid upgrade plan** requested by the **Board**.

5.7 Removal of shared connected assets from service

- 5.7.1 If two or more **designated transmission customers** are connected to a **point of connection**, and **Transpower** is required by a **transmission agreement** between **Transpower** and each of those **designated transmission customers** to provide the **connection assets** at the **point of connection**, **Transpower** may only permanently remove a **connection asset** at that **point of connection** from service:
- 5.7.1.1 if the **designated transmission customers** unanimously agree with the permanent removal and rules 5.1 to 5.3 (if applicable) are complied with; or
 - 5.7.1.2 where the **designated transmission customers** do not unanimously agree or none of the **designated transmission customers** agree with the permanent removal, if the permanent removal results in a net benefit, as calculated under the test set out in rule 5.9.
- 5.7.2 For the avoidance of doubt, this rule applies only where **Transpower** proposes to remove a **connection asset** from service and not replace the **asset** with another **connection asset**.

5.8 Reconfiguration of shared connection assets

If two or more **designated transmission customers** are connected to a **point of connection**, and **Transpower** is required by a **transmission agreement** between **Transpower** and each of those **designated transmission customers** to provide the **connection assets** in the configuration specified in each of those **transmission agreements**, **Transpower** may only change that configuration:

- 5.8.1 if the **designated transmission customers** unanimously agree with the reconfiguration and rules 5.1 to 5.3 (if applicable) are complied with; or
- 5.8.2 where the **designated transmission customers** do not unanimously agree or none of the **designated transmission customers** agree with the reconfiguration, if the reconfiguration results in a net benefit, as calculated under the test set out in rule 5.9.

5.9 Net benefits test

- 5.9.1 The test that **Transpower** must apply under rules 5.7.1.2 and 5.8.2 involves:
 - 5.9.1.1 estimating, to the extent that they arise, the following costs:
 - (a) any additional fuel costs incurred by any **generators** in respect of any **generating units** that will be dispatched or are likely to be dispatched during or after the removal of the **connection asset** or reconfiguration of the **connection assets** as a result of the removal or reconfiguration;
 - (b) the direct labour and material costs that will be incurred by **Transpower** and the **designated transmission customers** undertaking the removal of the **connection asset** or reconfiguration of the **connection assets**;
 - (c) any increase in the estimation of **expected unserved energy** as a result of the removal of the **connection asset** or reconfiguration of the **connection assets**; and
 - (d) any other relevant matter specified in clauses 27.1 to 27.9 of Schedule F4 of section III, where the matter referred to in those clauses is a cost to any person who produces, transmits, retails or consumes **electricity** in New Zealand; and

5.9.1.2 estimating, to the extent that they arise, the following benefits:

- (a) any reduction in estimated maintenance costs resulting from the removal of the **connection asset** or reconfiguration of the **connection assets** (including **Transpower's** and any **designated transmission customer's** costs);
- (b) and reduction in fuel costs incurred by any **generators** in respect of any **generating units**, arising or likely to arise during or after the removal of the **connection asset** or reconfiguration of the **connection assets** as a result of the removal or reconfiguration;
- (c) and decrease in the estimation of **expected unserved energy** as a result of the removal of the **connection asset** or reconfiguration of the **connection assets**; and
- (d) any other relevant matter specified in clauses 27.1 to 27.9 of Schedule F4 of section III, where the matter referred to in those clauses is a benefit to any person who produces, transmits, retails or consumes **electricity** in New Zealand; and

5.9.1.3 deducting the costs estimated under rule 5.9.1.1 from the benefits estimated under rule 5.9.1.2 to determine the net benefits of the proposed removal of the **connection asset** or reconfiguration of the **connection assets**.

5.9.2 **Transpower** may apply the test under this rule at differing levels of rigour in different circumstances, which may include taking into account the number of **assets** to be reconfigured, value of the **assets** to be removed or reconfigured, and the size of the load served by the **assets**.

5.9.3 **Transpower** may only:

5.9.3.1 make a reasonable estimate of the costs and benefits identified in rule 5.9.1, based on information reasonably available to it at the time it undertakes the test and taking into account the proposed number of **assets** to be reconfigured, the value of the **assets** to be removed or reconfigured, and the size of the load served by the **assets**; and

5.9.3.2 take account of events that can be reasonably foreseen.

5.9.4 Fuel costs under rule 5.9.1 must:

5.9.4.1 in the case of thermal **generating stations**, be based on the fuel costs specified in the **statement of opportunities**; or

5.9.4.2 in the case of hydroelectric **generating stations**:

(a) be a reasonable estimate of the fuel costs, based on the economic value of the water stored at a hydroelectric **generating station**, provided by a suitably qualified person other than:

(1) **Transpower**; or

(2) an employee of **Transpower**; and

(b) be published, as provided for in the **Outage Protocol**.

5.9.5 The direct labour costs of **Transpower** and the **designated transmission customers** under rule 5.9.1.1 may include any amounts paid by **Transpower** to contractors, but must not include any apportionment of the overheads or office costs of **Transpower** or the **designated transmission customers**.

5.9.6 The material costs of **Transpower** and the **designated transmission customers** under rule 5.9.1.1 are the costs of the materials used in carrying out the work during the removal or reconfiguration of the **connection asset**.

5.9.7 In assessing the costs and benefits under rule 5.9.1, **Transpower** must consider any reasonably expected operating conditions, the forecasts in the **system security forecast**, likely fuel costs, and any other reasonable assumptions.

5.9.8 The estimation of **expected unserved energy** under rule 5.9.1 must be based on:

5.9.8.1 the estimated actual amount and value of **expected unserved energy** as agreed between **Transpower** and each affected **designated transmission customer**; or

5.9.8.2 if **Transpower** and a **designated transmission customer** cannot agree on the amount and value of **expected unserved energy** under rule 5.9.8.1, the value of unserved energy that applies under clauses 8.3.4 and 8.4.3 of Schedule F4 of section III and **Transpower's** estimate of the amount of **expected unserved energy** in respect of each affected **designated transmission customer** and end-use customer;

5.10 Request to the Board to request a grid upgrade plan

Transpower may request in writing that the **Board** request a **grid upgrade plan** from **Transpower**:

5.10.1 for the purposes of rule 5.6.3; or

5.10.2 if permitted by a **transmission agreement**.

6. Resolutions of disputes

6.1 Certain disputes relating to transmission agreements may be referred to Rulings Panel

If a dispute between **Transpower** and a **designated transmission customer** concerning:

- 6.1.1 the customer specific terms of a **transmission agreement** being negotiated between those parties;
- 6.1.2 a requested variation of any of the terms of a default **transmission agreement** (other than a variation under rule 3.1.5) that applies between **Transpower** and the **designated transmission customer** in accordance with rules 3.1.3 to 3.1.6 (including a requested variation from the services described in the default **transmission agreement**);
- 6.1.3 the schedules proposed by **Transpower** under sub-paragraphs (5) to (8) of rule 3.1.3.2(b) for a default **transmission agreement**;
- 6.1.4 any revision to clause 37 or Schedule 4 or Schedule 5 of a default **transmission agreement** proposed by **Transpower** under rules 3.1.5 or 3.1.7; or
- 6.1.5 the schedules proposed by **Transpower** under sub-paragraphs (e) to (h) of rule 3.1.6.2 on the expiry or termination of a **transmission agreement**;

is not resolved within a reasonable time, either party may refer the matter to the **Rulings Panel** for determination.

6.2 Rulings Panel has discretion to determine dispute

6.2.1 The **Rulings Panel** may, in its discretion, decide whether or not to undertake the determination of a dispute under rules 6.1.1 or 6.1.2.

6.2.2 If the **Rulings Panel** decides not to undertake the determination of such a dispute, the **Rulings Panel** must inform **Transpower** or the **designated transmission customer**:

- 6.2.2.1 that the **Rulings Panel** intends to do no more in relation to the matter; and

6.2.2.2 of the reasons for that intention.

6.3 Determinations by Rulings Panel

6.3.1 In determining a dispute under this rule, the **Rulings Panel** must take into account:

6.3.1.1 the principles for **benchmark agreements** in rule 4.2;

6.3.1.2 the desirability of consistent treatment of **designated transmission customers** except where special circumstances justify a departure; and

6.3.1.3 the potential impact of any decision on the contents of other **transmission agreements** or existing agreements as described in rule 8.

6.3.2 The **Rulings Panel** must not determine disputes relating to the interpretation or enforcement of any **transmission agreement** including a **benchmark agreement**.

6.4 Rulings Panel to give written notice of determinations

The **Rulings Panel** must give notice to the parties of its determination, as soon as reasonably practicable.

6.5 Status of default transmission agreement while Rulings Panel determining dispute

Nothing in this rule 6 overrides the application of a **benchmark agreement** as a default **transmission agreement** under rule 3.1, pending a determination of the **Rulings Panel**.

7. Review of benchmark agreements

7.1 Board may initiate review

Having regard to the statutory objectives of the **Board** in section 172N of the **Act** and to the principles for **benchmark agreements** set out in rule 4.2, the **Board** may initiate a review of a **benchmark agreement** at any time. Reviews of the **Connection Code** are carried out in accordance with rule 3.3.10.

7.2 Review process

Any review of **benchmark agreements** must follow the purpose, process and principles in rule 4.

8. Existing agreements not affected

8.1 Existing agreements

8.1.1 Except as provided for by rule 9.1 of section IV, Part F does not apply to or affect the rights, powers or obligations of any **participant** or **Transpower** under a written agreement entered into between that **participant** and **Transpower** for connection to and/or use of the **grid** that is:

8.1.1.1 entered into before 29 October 2003; or

8.1.1.2 based on **Transpower's** standard connection contract and entered into before the date on which the first **benchmark agreement** was included in a schedule to this section, under rule 4.6.

8.1.2 The exception from part F in rule 8.1.1 does not apply to a right, power or obligation of a **participant** that arises because of the variation of an agreement described in rules 8.1.1.1 or 8.1.1.2.

8.1.3 For the avoidance of doubt, the posted terms and conditions of **Transpower** do not constitute a written agreement.

8.2 Copies of other agreements to be provided to Board

8.2.1 If requested to do so by the **Board**, **Transpower** or a **participant** must provide a copy of any written agreement for connection to and/or use of the **grid** that they are a party to and that was entered into before the date on which the first **benchmark agreement** was included in a schedule to this section, under rule 4.6.

8.2.2 The copy that is provided must be;

8.2.2.1 a copy of the complete agreement; and

8.2.2.2 certified by a director or the chief executive of **Transpower** or the **participant**, to the best of the director's or chief executive's knowledge and belief, to be a true and complete copy of the agreement.

8.2.3 Such agreements are to be **published** by the **Board**, unless the parties establish to the satisfaction of the **Board** that there is good reason for not **publishing** them.

8.3 **Application to Comalco agreements**

Subpart 2 of Part 10 of the **regulations** applies in respect of a **Comalco agreement**.