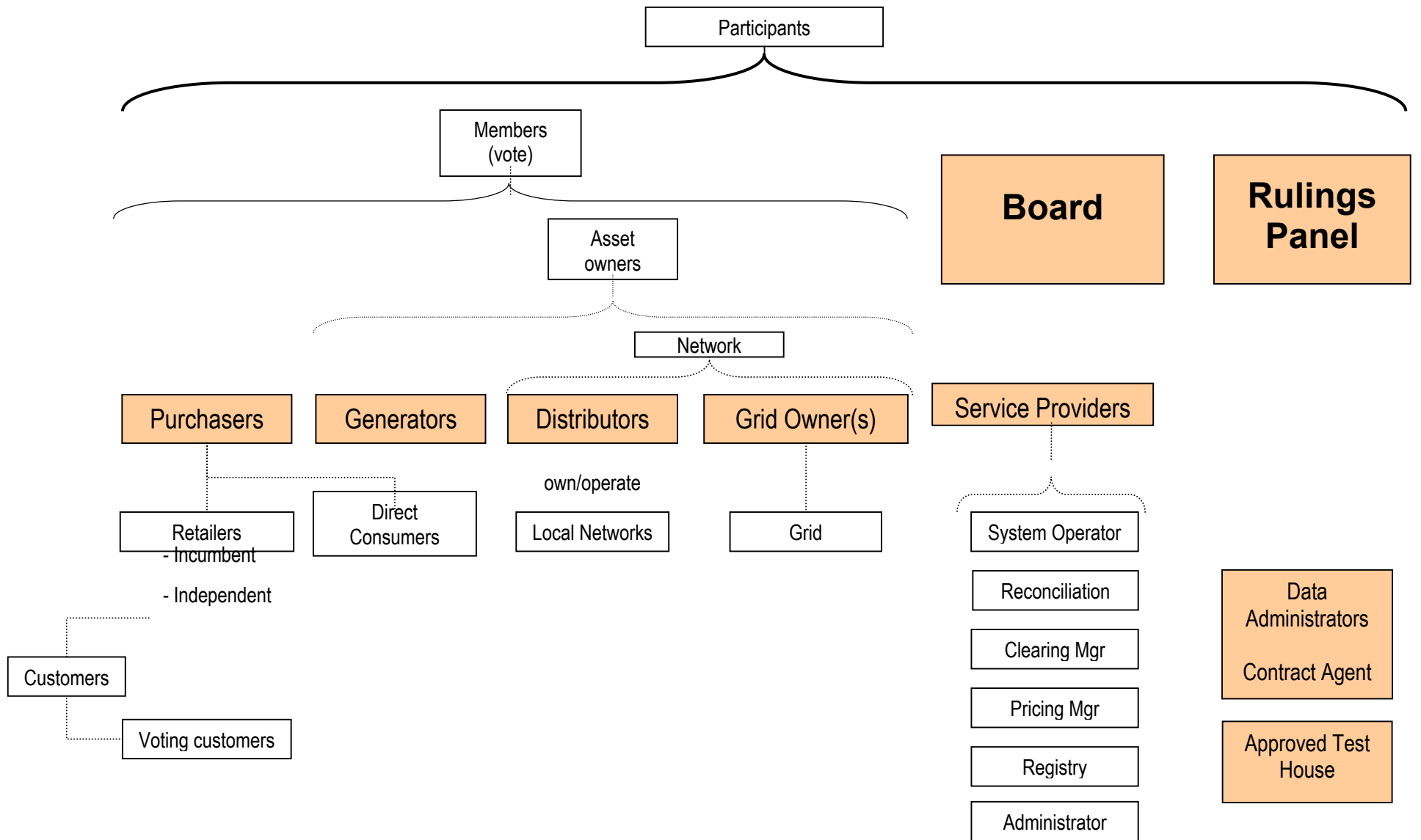


# Terminology



---

## Annexure A – Defined Terms

---

1. Definitions used in these rules
2. Construction of these rules
  - 2.1 General principles of construction
  - 2.2 A special definition of “related person”
  - 2.3 A special definition of “independent person”

---

### Definitions used in these rules

---

In these **rules**, unless the context otherwise requires:

“\$” means New Zealand dollars;

“**active energy**” means the integration over time of the product of voltage and current and the cosine of the phase angle between them, and which is normally measured in kilowatt hours (kWh);

“**active meter**” means a **meter** used for the measurement of **active energy**;

“**adjustment**” means an operation or process intended to reduce the differences between the values indicated by an instrument and the values realised by a **reference standard** or **working standard** to within a predetermined tolerance and “**adjust**” and “**adjusted**” have corresponding meanings;

“**adjustment factor**” has the meaning set out in part H, rule 2.4;

“**administrative cost**” means, in relation to any **ancillary service**, those significant costs that can be specifically attributed to the implementation of the procurement of that **ancillary service** other than those costs referred to in part C, section IV, rule 6.1;

“**adopting deed**” means a deed in a form approved by the **Board** by which a person becomes a **member** under these **rules** under part A, section III, rule 1.5;

“**affected consumers**” means end consumers that are or would be directly affected through either changes in electricity prices or **transmission service** from the proposed **service change**;

“**agency**” means the professional recruitment agency selected under rule 1.9.3 of section II of part A to assist in the process of identifying suitable candidates for the position of **director**;

“**agreed auditor**” means an **auditor** selected under part F, section III, rule 6.2 and engaged by the **Board** under part F, section III, rule 6.4;

“**allocable cost**” has the meaning set out in part C, section IV, rule 6.1;

“**alternative ancillary services arrangement**” means an arrangement between a **member** and another **member** or other person or an arrangement involving only a **member** which is authorised by the **system operator** in accordance with part C, section IV, rule 4;

“**ancillary service**” means **black start, over frequency reserve, frequency keeping, instantaneous reserve or voltage support**;

“**ancillary service agent**” means a **member** who provides any **ancillary service**;

“**annual audit**” means a complete review of all processes, procedures, facilities and other relevant items to confirm compliance with the **rules**;

“**annual consumption list**” means the list published by the **market administrator** in accordance with part G, section IV, rule 3.33;

“**appellants**” means any person who has lodged with the **Board** an appeal under part F, section II, rule 4.4 or rule 5.1;

“**approved calibration laboratory**” means the Measurement Standards Laboratory of New Zealand, or a calibration laboratory that has been accredited under the Testing Laboratory Registration Act to ISO 17025, or an international laboratory that has been recognised by the **Chief Metrologist** for the specific **calibration** required;

“**approved test house**” means a meter testing and calibration facility that has been approved by the **market administrator** in accordance with the procedures in a **code of practice** or admitted pursuant to rule 3.3 of section II of part I;

“**approved test laboratory**” means a test laboratory that has been accredited under the Testing Laboratory Registration Act to ISO 17025 for the specific test required;

“**asset**” means equipment or plant which is connected to or forms part of the **grid** and in the case of part C also includes equipment or plant which is intended to become connected to the **grid**, and equipment or plant of **embedded generators** ;

“**asset capability statement**” means a statement of capability and operational limitations that applies to specific **assets** during the normal and abnormal conditions which may arise on the **grid**, provided to the **system operator** in accordance with Technical Code A – Assets;

“**asset owner**” means a person who owns **assets** used for the generation or conveyance of **electricity** and in the case of part C also includes persons who operate such **assets** if the owner is not a **member**;

“**asset owner performance obligations**” and “**AOPO**” means a performance obligation specified in part C, section III, with which **asset owners** must comply for the **system operator** to plan for and achieve its **principal performance objectives**;

“**Associated Person**” means Meaning of “associated person” means where a **participant** has **control** of a person, or a person has **control** of a **participant**, the **participant** will be deemed to be associated with that person. A **participant** is also deemed to be associated with another person who is:

- (a) An officer or employee
- (b) An officer or employee of the participant; or

- (c) An entity controlled by an officer or employee
- (d) An entity controlled by an officer or employee of the participant; or
- (e) An entity controlled by an associated person
- (f) An entity controlled by any person with whom the participant is deemed to be associated or related by virtue of rule 2.2 of Annexure A.

“**assumed coefficient of variation**” means the value of **coefficient of variation** which is set by the **market administrator** for the purpose of calculating the **preliminary sample size**;

“**at risk HVDC transfer**” means the quantity of **MWh** for each **trading period** calculated in accordance with tables 1 and 2 below;

- HVDC configuration** = the operating configuration of the **HVDC link** at the beginning of **trading period t**;
- $INJ_{HVDCHAYt}$  = the **electricity** injected from the **HVDC link** into the North Island grid assets at the North Island **HVDC injection point** in **trading period t**; and
- $INK_{HVDCBENT}$  = the **electricity** injected from the **HVDC link** into the South Island grid assets at the South Island **HVDC injection point** in **trading period t**.

**Table 1:** HVDC northward transfer – if **electricity** is injected at the North Island **HVDC injection point** in the relevant **trading period**

HVDC Configuration	Electricity injected in trading period t	At risk HVDC transfer
Both Poles	> 299	$INJ_{HVDCHAYt} - 269$
<i>1.1.1 Both Poles</i>	$\leq 299$	0
Pole 2 and 1 Halfpole	> 196	$INJ_{HVDCHAYt} - 166$
Pole 2 and 1 Halfpole	$\leq 196$	0
Pole 2 only	> 30	$INJ_{HVDCHAYt}$
Pole 2 only	$\leq 30$	0
Two Halfpoles	> 172	$INJ_{HVDCHAYt} - 142$
Two Halfpoles	$\leq 172$	0
One Halfpole only	> 30	$INJ_{HVDCHAYt}$
One Halfpole only	$\leq 30$	0

**Table 2:** HVDC southward transfer – if **electricity** is injected at the South Island **HVDC injection point** in the relevant **trading period**.

HVDC Configuration	Electricity injected in trading period t	At risk HVDC transfer
Both Poles	> 223	$INK_{HVDCBENT} - 193$
<i>1.1.2 Both Poles</i>	$\leq 223$	0
Pole 2 and 1 Halfpole	> 131	$INK_{HVDCBENT} - 101$
Pole 2 and 1 Halfpole	$\leq 131$	0
Pole 2 only	> 30	$INK_{HVDCBENT}$
Pole 2 only	$\leq 30$	0

Two Halfpoles	> 131	INJ <sub>HVDCBENT</sub> - 101
Two Halfpoles	≤ 131	0
One Halfpole only	> 30	INJ <sub>HVDCBENT</sub>
One Halfpole only	≤ 30	0

“**auction**” means a **must-run dispatch auction** conducted by the **clearing manager** under part I, section VI;

“**auction fee**” means the monthly fee payable to the **clearing manager** pursuant to its service provider deed for conducting any **auction**;

“**auction revenue**” means for a **generator** the amount payable in accordance with part I, section VI, rule 1.7 and for a **purchaser** the amount receivable in accordance with part I, section VI, rule 1.5;

“**auction right**” means the right (but not the obligation) to offer for sale a specified quantity of **electricity** to the **clearing manager** at zero price;

“**audit**” means a process of inspection of procedures, facilities and other relevant items to confirm compliance with the **rules** and “**audited**” has a corresponding meaning;

“**auditor**” means a person selected to carry out an **audit**;

“**automatic control plant**” means any hydro generating plant that has a pre-programmed generation profile and an automatic override should uncontrollable water inflows change;

“**automatic under frequency load shedding**” means automatic shedding of electrical load when frequency falls below preset frequency as specified in part C Schedule C3 Technical Code B rule 6.2.1.

“**availability cost**” means the costs incurred by the **system operator** in purchasing **instantaneous reserve** and providing that **instantaneous reserve** for a **trading period**, including:

- (a) Payments made by the **system operator** for that **trading period** pursuant to contracts which secure the availability of **instantaneous reserves**; and
- (b) The annual and variable costs (including any constrained-on costs) incurred by the **system operator** under any other contracts allocated by the **system operator** to that **trading period**; and
- (c) The **system operator’s** overhead relating to **instantaneous reserve** allocated to that **trading period**

but excluding any **administrative cost**;

“**average peak season day**” has the meaning set out in part H, rule 2.4;

“**back-up metering information**” means **metering information** from any alternative metering installation which measures the same flow of **electricity** at the relevant **grid exit points** and **grid injection points** as would have been given pursuant to part G, section IV, rule 3.27.2;

**“bank”** means an incorporated person which carries on the business of banking and which maintains an acceptable credit rating in accordance with part H, rule 2.3;

**“bank bill bid rate”** means the rate per annum (rounded upwards to two decimal places) displayed at or about 10.45am on the Reuters Screen on page BKBM (or its successor or equivalent page) on the relevant date as the bank bill “settlement” bid rate for bank bills having a tenor of one month provided that if such a rate is not available then the **“bank bill bid rate”** will be the rate determined by the **clearing manager** to be the nearest practicable equivalent;

**“benefit to the public”** has the same meaning as in the Commerce Act 1986.

**“bid”** means the information submitted to the **system operator** by a **purchaser** in accordance with part G, section II, rule 3.10 and includes any **bid** revised in accordance with part G, section II, rule 3.14 but excludes any **bid** cancelled in accordance with that rule;

**“billing period”** means a period of one calendar month;

**“black start”** means an ancillary service required to enable a **generating unit** isolated from a **grid** to be livened and connected to the **grid**;

**“block dispatch group”** means a group of stations linked by hydrological coupling which have **grid injection points** with similar **final marginal location factors** and which are the subject of an agreement between the **system operator** and a **generator** pursuant to part G, section III, rule 3.6;

**“Board”** means [Electricity Governance Board] Limited;

**“Board investigator”** means an person appointed under rule 2.3 of section V of part A;

**“board of directors”** means the board of directors of the **Board**;

**“bona fide physical reason”** includes:

- (a) in relation to any **generator** or **purchaser** or any **asset owner**, a situation where personnel or plant safety is at risk;
- (b) in relation to a **generator**:
  - (i) a reasonably unforeseeable full or partial loss of generating capability from an item of generation plant which is the subject of an existing **offer** by that **generator**;
  - (ii) a reasonably unforeseeable change in the level of expected uncontrollable water inflows into the head pond of a hydro station which is the subject of an existing **offer** by that **generator**;
  - (iii) a reasonably unforeseeable change in circumstances such that the **generator** will breach any consent held by it under the Resource Management Act 1991;
  - (iv) a reasonably unforeseeable physical infeasibility which arises from a **pre-dispatch schedule** or **dispatch schedule**;
- (c) in relation to a **purchaser**:

- (i) a reasonably unforeseeable full or partial loss of demand at a **grid exit point** which is the subject of an existing **bid** by that **purchaser**;
- (ii) a reasonably unforeseeable change in circumstances such that the **purchaser** will breach any consent held by it under the Resource Management Act 1991;
- (iii) a reasonably unforeseeable full or partial loss of generating capability from an item of generation plant owned by, or the subject of a supply contract with, that **purchaser** during the relevant **trading periods**;
- (d) in relation to any **generator** or **purchaser**, the cessation of any **bona fide physical reason** earlier than was originally advised (by way of a revised **bid** or **offer**) by the **generator** or **purchaser** at the time the original **bona fide physical reason** arose;

“**business**” means the business carried out as a **participant** under the **rules**;

“**business day**” means any day of the week except Saturdays, Sundays, **national holidays** and any other day from time to time declared by the **market administrator** not to be a **business day** by notice to each **member** in the manner set out in the **rules**;

“**calibration**” means the set of operations that establishes, under specified conditions, the relationship between the values indicated by the measuring system and the corresponding values of a quantity realised by a **reference standard** or **working standard** and “**calibrate**” and “**calibrated**” have corresponding meanings;

“**calibration report**” means a report which contains the results of all **calibration** tests carried out on a **metering installation** or a component of a **metering installation** or a **working standard** by an **approved test house** as part of the **certification** process;

“**call**” has the meaning given to it in part H, rule 5.3;

“**cash deposit**” means the cash deposited in **cleared funds** by a **purchaser** in accordance with part H, rules 3 or 5 in order to satisfy the prudential requirements of part H, rule 2 and includes any interest not paid out in accordance with part H, rule 3.4;

“**cash deposit accounts**” means the trust accounts established by the **clearing manager** in accordance with part H, rule 3.1;

“**cash interest rate**” means the interest rate calculated by taking a weighted average of interest rates applying to each **purchaser’s cash deposit**;

“**causer**” means the person whose **asset** caused an **under-frequency event**;

“**certification**” means;

- when applied to a **metering installation**, confirmation that the whole metering system, is installed and functioning correctly, and the **metering installation** meets the requirements of the **rules**; and
- when applied to an individual component of a **metering installation**, confirmation that that component meets the requirements of the **rules**;

“**certification report**” means a report which contains the **calibration report** and all other information relevant to the **certification** of a **metering installation** or a component of a **metering installation**;

“**certification sticker**” means a sticker which is valid for a specific period and which is attached to a **metering installation** or a component of a **metering installation** confirming that the **metering installation** or component has been **certified** by an **approved test house** and found to comply with the requirements the **rules** and relevant **codes of practice**. (Refer **code of practice 3**, rule 5.2);

“**certified**” means having achieved **certification**;

“**certify**” means to carry out a **certification**;

“**check metering information**” means **metering information** from a meter and located at the **grid exit point** or **grid injection point** giving equivalent information, but not necessarily of the same accuracy, as the relevant **grid exit point** or **grid injection point** meter;

“**chief metrologist**” is the person appointed by the Minister under the National Standards Act 1992 as the verifying authority for the provision of uniform measures;

“**circuit-breaker**” means a switching device, capable of making, carrying and breaking currents under normal circuit conditions and also making, carrying for a specified time and breaking currents under specified abnormal conditions such as those of short circuit;

“**class**” means a **member** or group of **members** among which votes are allocated in accordance with a **rule** specified in schedule A6 of part A.

“**class votes**” means the votes allocated to a **class** of voter.

“**class A approved test house**” means an **approved test house** which has been approved in accordance with **code of practice 2**, rule 3;

“**class B approved test house**” means an **approved test house** which has been approved in accordance with **code of practice 2**, rule 4;

“**cleared funds**” means on any **business day**, funds which are immediately available for disbursement on that day;

“**clearing auction price**” means the lowest successful price bid at an auction per MW per half hour;

“**clearing manager**” means the **service provider** for the time being who is appointed as clearing manager pursuant to part A, section VI, rule 1;

“**code of practice**” means a code of practice issued pursuant to the **rules**;

“**coefficient of variation**” means the ratio of the standard deviation to the mean of the distribution for the random variable under consideration;

“**commissioning**” means to verify the correct operation of metering equipment installed in a **metering installation**;



“**commissioning report**” means a report which contains the results of all **commissioning** tests carried out on a **metering installation** an **approved test house** as part of the **certification** process;

“**common quality**” means those elements of quality of **electricity** conveyed across the **grid** that cannot be technically or commercially isolated to an identifiable person or group of persons;

“**complainant**” means a person who lays a complaint in respect of a **participant** as more specifically defined in part A, section V, rule 1.2;

“**confirmed pricing methodology**” means a **pricing methodology** which has been confirmed by the **Board** under part F, section III, rule 5.9.1;

“**connection type**” means a connection that identifies whether the connected person is a **generator**, **distributor** or **direct consumer** and whether the connection is to the **grid** or a **local network**;

“**constrained off amounts**” means the amounts calculated by the **clearing manager** pursuant to part G, section IV, rule 4.3;

“**constrained on amounts**” means the amounts calculated by the **clearing manager** pursuant to part G, section IV, rules 5.3 and 5.4;

“**constrained on compensation**” means the amounts payable to any **generator** and the amounts payable by the **system operator** or any **purchaser** in accordance with part G, section IV, rule 5;

“**constraint**” means a limitation in the capacity of the **grid** to convey electricity caused by limitations in capability of available **assets** forming the **grid**; or limitations in the performance of the integrated power system;

“**consumer**” means any person who is supplied **electricity** for consumption and includes a **distributor**, **retailer** or **generator** where the **distributor**, **retailer** or **generator** is supplied with **electricity** for its own consumption;

“**consumption pattern**” means the result of the allotment of total consumption over some time period to each **half hour** interval within that time period;

“**contract agent**” means a person or persons appointed by the **Board** pursuant to part A, section VI, rule 2.1;

“**contract specifications**” means specifications prescribing the specific terms of, and terms of trading in, each class of contract which may from time to time be traded on a market under these **rules**;

“**controller**” means:

- (a) in relation to a company:
  - (i) any person in accordance with whose directions and instructions the persons occupying the position of directors of the company are accustomed to act (but disregarding advice given in a professional capacity); and
  - (ii) any person who is entitled to exercise, or control the exercise of, 50% or more of the voting power at any general meeting of the

company or of another company of which the company is a subsidiary; and

- (b) in relation to an unincorporated body of persons:
- (i) any person in accordance with whose directions and instructions the officers of the body are accustomed to act (but disregarding advice given in a professional capacity); and
  - (ii) any person who is entitled to exercise, or control the exercise of, 50% or more of the voting power on any resolution of the body; and
- (c) in relation to any person, any person who has the power to appoint or remove a majority of the members of the governing body of that person or otherwise controls or has the power to control the affairs or policies of that person; and "control" and "controlled" shall be construed accordingly;

"**control room**" means the location at which **asset owners** have facilities to receive operational instructions from the **system operator** and to act on those instructions;

"**control system**" means equipment which adjusts the output voltage, frequency, **MW** or reactive power, as the case may be, of an asset in response to certain aspects of common quality such as voltage, frequency, **MW** or reactive power. Such equipment includes, but is not limited to, speed governors and exciters;

"**customer**" means a person who has agreed to purchase **electricity** from a **retailer** at a specific **ICP**;

"**data administrator**" means the person responsible for gathering, validating, processing and storing **metering information** on behalf of **retailers**;

"**data collector**" means a person responsible for collecting metering data for non **half-hour metering**;

"**data logger**" means a device that complies with **code of practice 4**. Note that in some equipment, the **data logger** is integral with the **meter**;

"**day**" means a period of 24 consecutive hours beginning at 0000 hours and ending at 2400 hours;

"**declaration date**" means the date, nominated by the **profile applicant**, on which the **market administrator** must, for a particular **profile**, notify every **member** of the information which will be entered into **code of practice 7**, Appendix 1 for that **profile**;

"**de-energisation**" means the movement of any isolator, breaker or switch or the removal of any fuse or link whereby no **electricity** can flow to or from a network or any part thereof and "**de-energise**" has a corresponding meaning;

"**default interest rate**" means the **bank bill bid rate** plus 5 percent per annum;

"**demand**" means the rate of consumption of electrical energy;

"**determination**" means a written decision of the **Board** on any **draft policy statement** and/or **draft procurement plan**;

“**direct consumer**” means a **consumer** with a **point of connection** at a **local network** or the **grid** and for the purpose of part C means a **consumer** with a **point of connection** to the **grid**;

“**director**” means a director of the **Board**;

“**disconnected price situation**” means the situation where:

- (a) the **software** used to determine **final prices** and **final reserve prices** substitutes a model variable for a nodal price equivalent to a model variable for deficit bus generation or surplus bus generation; and
- (b) there is no load or generation at the relevant **grid injection point** or **grid exit point** at the relevant **trading period** in the model; and
- (c) the relevant **grid injection point** or **grid exit point** is not connected to the **network** for the duration of the relevant **trading period** in the model;

“**dispatch**” means the process of:

- (a) pre-dispatch scheduling to match expected **supply** with expected **demand**, and to allocate ancillary service offers and transmission offers to match expected **grid** conditions; and
- (b) rescheduling to meet forecast **demand**; and
- (c) issuing instructions based on the **pre-dispatch schedule** and the real-time conditions to manage resources to meet the actual **demand**;

“**dispatch instruction**” means any instruction formulated and issued by the **system operator** in accordance with part G, section III, rule 4.5;

“**dispatch objective**” means the objective defined in part G section III, rule 3;

“**dispatch prices**” means the prices for **electricity** at all **grid exit points** and **grid injection points** and the prices for **sustained instantaneous reserve** and **fast instantaneous reserve** in dollars and cents prepared by the **system operator** in accordance with part G, section III, rule 5;

“**dispatch quantities**” means the quantities of **electricity**, **sustained instantaneous reserve** and **fast instantaneous reserve** calculated by the **system operator** in accordance with part G, section III, rule 5;

“**dispatch schedule**” means the schedule from which the **system operator** formulates and issues dispatch instructions;

“**dispensation**” means an exemption from compliance with an **AOPO** or **technical code** granted by the **system operator** in accordance with the process set out in part C, section III, rule 7 and includes a **transitional dispensation**;

“**distributor**” means any person who owns or operates a **local network**;

“**domestic consumer**” means a person who acquires **electricity** for personal, domestic or household use or consumption and does not acquire **electricity** or hold himself or herself out as acquiring **electricity** for the purpose of resupplying if in trade or consuming it in the course of production or manufacture;

“**draft policy statement**” means a **policy statement** that has been submitted pursuant to part C, section II, rule 6.2, but has not been published in accordance with part C, section II, rule 8.10.2;

“**draft procurement plan**” means a plan that has been submitted pursuant to part C, section IV, rule 2.1, but has not been published in accordance with part C, section IV, rule 2.12.2; “**Draft Rulebook**” means the draft version of these **rules** dated 8 November 2001;

“**EGEC**” means the Electricity Governance Establishment Committee set up to establish these **rules**;

“(electrical) assets” IEC 50 (826-07-01) means any item used for such purposes as generation, conversion, transmission, distribution or utilisation of electrical energy, such as machines, transformers, apparatus, measuring instruments, protective devices, wiring material, appliances.

Note: Unless otherwise indicated by the context, this IEC definition will apply where the word “assets” is not shown in bold type;

“**electrical installation**” means all fittings that form part of a system for conveying **electricity** at any point from the **point of supply** to a **consumer** to any point from which **electricity** conveyed through that system may be consumed (including any fittings that are used or designed or intended for use, by any person, in or in connection with the generation of **electricity** for that person’s use and not for supply to any other person), but does not include any electrical appliance;

“**electricity**” means electrical energy measured in kilowatt-hours (kWh);

“**embedded generator**” means a **generator** who owns or operates one or more **generating units** which are directly connected to a **local network**;

“**energy injection customer**” means a **generator** who generates **electricity** which is injected into the **grid** or into a **local network**;

“**energy off-take customer**” means any person who owns **electricity** immediately after it passes from the **grid** to a **local network**;

“**equivalence arrangement**” means an arrangement put in place in accordance with the process set out in part C, section III, rule 7;

“**equivalent day**” means the day of a previous week corresponding to the day for which an **initial estimate** or **final estimate** is required to be made. However, if the day is a **national holiday** then the **equivalent day** will be deemed to be the previous Sunday. In addition, if the day for which an **initial estimate** is required to be made is a **business day**, but the corresponding day of the previous week is a **national holiday** then the **equivalent day** is deemed to be the next prior corresponding day that is not a **national holiday**;

“**error compensation**” means the application of a predetermined **adjustment** or process to the data within or obtained from a **meter** or **metering installation** in order to correct such data for known errors in any component or components of the **metering installation**;

“**establishment costs**” means those costs incurred by **Transpower** relating to the establishment of the services the initial **CQC** is required to perform with the objective of maintaining the **common elements of quality** in the manner required by the **CQC deed**,

and the work of the **JIP**, including, but not limited to: structure design consultancy services, contract development, project management, recruitment of personnel to perform the **CQC** services, and technical consultancy services and support costs, but excluding **reform costs**;

“**event charge**” means the amount calculated pursuant to part C, section IV, rule 6.5.2;

“**event date**” means the date on which a **retailer** commences selling **electricity** to a person and for which notification is required under part E, rule 2;

“**event of default**” means any event as listed in part H, rule 10;

“**exempt generating station**” has the meaning set out part C section III rule 2.5;

“**fast instantaneous reserve**” means the instantaneous MW provided at 6 seconds after the contingent event to arrest the system frequency fall at or above the minimum frequency specified in part C, section II, rule 2;

“**final estimate**” means the mean of the metering data for each of the previous four **equivalent days** for the relevant **trading period** weighted in accordance with the quantity of **electricity** sold in the relevant **trading period** on the **equivalent days** in the relevant island as determined in accordance with the following formula:

$$\frac{Eday_4 + Eday_3 + Eday_2 + Eday_1}{4} \times \left\{ \frac{(IslandLoad_0)}{\left( \frac{IslandLoad_4 + IslandLoad_3 + IslandLoad_2 + IslandLoad_1}{4} \right)} \right\}$$

where:

**Eday<sub>1</sub>** is the quantity of **electricity** measured at the relevant **metering installation** in kWh for the **trading period** of the **equivalent day** one week prior to the **trading day** for which the estimate is required.

**Eday<sub>2</sub>** is the quantity of **electricity** measured at the relevant **metering installation** in kWh for the **trading period** of the **equivalent day** two weeks prior to the **trading day** for which the estimate is required.

**Eday<sub>3</sub>** is the quantity of **electricity** measured at the relevant **metering installation** in kWh for the **trading period** of the **equivalent day** three weeks prior to the **trading day** for which the estimate is required.

**Eday<sub>4</sub>** is the quantity of **electricity** measured at the relevant **metering installation** in kWh for the **trading period** of the **equivalent day** four weeks prior to the **trading day** for which the estimate is required.

**Island Load<sub>0</sub>** means the quantity of **electricity**, measured in kWh, for the relevant **trading period** (as measured prior to the commencement of the calculation of this estimate) supplied in the island in which the relevant **metering installation** is located, less any measurement

taken at any **metering installation** for which an estimate is being obtained for the same **trading period** and island.

Island Load<sub>1</sub> means the quantity of **electricity**, measured in kWh, for the **trading period** of the **equivalent day** one week prior to the **trading day** for which the estimate is required (as measured prior to the commencement of the calculation of this estimate) supplied in the island in which the relevant **metering installation** is located, less any measurement taken at any **metering installation** for which an estimate is being obtained for the same **trading period** and island.

Island Load<sub>2</sub> means the quantity of **electricity**, measured in kWh, for the **trading period** of the **equivalent day** two weeks prior to the **trading day** for which the estimate is required (as measured prior to the commencement of the calculation of this estimate) supplied in the island in which the relevant **metering installation** is located, less any measurement taken at any **metering installation** for which an estimate is being obtained for the same **trading period** and island.

Island Load<sub>3</sub> means the quantity of **electricity**, measured in kWh, for the **trading period** of the **equivalent day** three weeks prior to the **trading day** for which the estimate is required (as measured prior to the commencement of the calculation of this estimate) supplied in the island in which the relevant **metering installation** is located, less any measurement taken at any **metering installation** for which an estimate is being obtained for the same **trading period** and island.

Island Load<sub>4</sub> means the quantity of **electricity**, measured in kWh, for the **trading period** of the **equivalent day** four weeks prior to the **trading day** for which the estimate is required (as measured prior to the commencement of the calculation of this estimate) supplied in the island in which the relevant **metering installation** is located, less any measurement taken at any **metering installation** for which an estimate is being obtained for the same **trading period** and island;

“**final marginal location factor**” means the factor that is determined by dividing the **final price** at any **grid exit point** or **grid injection point** by the **final price** at the relevant **reference point**;

“**final price**” means a price in dollars and cents for each **grid injection point**, each **grid exit point** and each **reference point** determined in accordance with the methodology specified by part G, section IV, rule 3.1;

“**final reserve price**” means the price calculated in dollars and cents for **fast instantaneous reserve** and **sustained instantaneous reserve** determined in each island in accordance with the methodology specified by part G, section IV, rule 3.1;

“**financial year**” means the twelve month period beginning [1 April] in each year;

“**forecast marginal location factor**” means the factor that is determined by dividing the **forecast price** at any **grid exit point** or **grid injection point** by the **forecast price** at the relevant **reference point**;

“**forecast prices**” means the prices in dollars and cents prepared by the **system operator** in accordance with the provisions of part G, section III;

“**forecast reserve prices**” means the prices in dollars and cents calculated by the **system operator** for **fast instantaneous** and **sustained instantaneous reserve** in accordance with the provisions of part G, section III;

“**formal complaint**” means a formal complaint formulated by the **investigator** under part A, section V, rule 1.26;

“**formal notice**” means a notice issued by the **system operator** in accordance with Technical Code B - Emergencies, rule 4.1;

“**frequency keeping**” means an **ancillary service** that maintains the system frequency within the **normal band**;

“**frequency regulating reserve**” means an **ancillary service** (such as the spare **synchronised** capacity of an **asset**) available to control frequency, the response time being sufficiently fast to control the frequency within the **normal band** for small changes in frequency;

“**frequency time error**” means a deviation from **New Zealand standard time** caused by variations in system frequency;

“**generating set**” (IEC 50 (602-02-01)) means a single **generator** (rotating machine transforming mechanical or thermal energy into electricity) which operates alone or in conjunction with other **generating sets**.

Note: For the purposes of the **technical codes** and the output ratings referred to, the set is taken to include the limitations of the energy source, turbine, generator, cable, set transformer and switchgear.

Refer also to:

- (a) “gross/net output of a set/power station” IEC 50 (602-03-04/05/06/07);
- (b) “(gross/net) maximum capacity of a unit/power station” IEC 50 (602-03-08/09); and
- (c) “(gross/net) available capacity of a unit/power station” IEC 50 (602-03-11/12);

“**generating unit**” means a machine that generates **electricity**;

“**generator**” means a person who owns **generating units** connected to the **grid** or to a **local network** and includes an **embedded generator**;

“**global date**” means, in respect of each **incumbent retailer**, the date from which that **incumbent retailer** is to be reconciled using **global reconciliation**;

“**global reconciliation**” means the process by which the metered and/or estimated consumption of all **customers** within a **local network** is submitted to the **reconciliation manager** and in which any difference between the total **electricity** supplied to the **local network**, as measured by the Transpower New Zealand Limited **grid exit point** metering, and the aggregate metered and/or estimated consumption of all **customers** within the **local network**, is allocated across those **customers** in the **local network** whose **electricity** consumption is not measured half hourly by **meters** which comply with the requirements of the **rules** in proportion to their individual metered and/or estimated consumptions;

“**grid**” means the nation-wide system of transmission lines, substations and other works including the **HVDC link** used to connect all **grid injection points** and/or **grid exit points** to convey **electricity** throughout New Zealand;

“**grid emergency**” means a situation where:

- (a) in the reasonable opinion of the **system operator**, one or more of the events set out in **technical code B – Emergencies**, rule 4.1, has occurred, or is reasonably expected to occur and urgent action is required of the **system operator** and/or **members** to alleviate the situation; or
- (b) independent action (as set out in **technical code B – Emergencies**, rule 8) is required of a **members** to alleviate the situation;

“**grid exit point**” means a **point of connection** on the **grid** where **electricity** may flow out of the **grid** or as determined by the **Board** following an application under part G, section II, rule 4. In relation to part G where **electricity** is sold to the **clearing manager** by an **embedded generator** at a **grid exit point** the **grid exit point** will be treated as a **grid injection point**;

“**grid injection point**” means a **point of connection** on the **grid** where **electricity** may flow into the **grid**. In relation to part G where **electricity** is bought from the **clearing manager** by an **embedded generator** at a **grid injection point** the **grid injection point** will be treated as a **grid exit point**;

“**grid connected generator**” means a **generator** whose **generating units** inject directly into the **grid** at a **grid injection point**;

“**grid interface**” means the **assets** used to make a connection to the **grid** (as the case may be), including associated protection, control and communication systems. The term includes the interface between assets forming part of the **grid**;

“**grid owner**” means a person who owns and/or operates any part of the **grid**;

“**GST**” means goods and services tax payable pursuant to the Goods and Services Tax Act 1985 or any similar tax levied in substitution therefor;

“**Guiding Principles**” means those principles set out at the beginning of part A;

“**half hour**” means a thirty minute period ending on any hour or half hour;

“**half-hour metering**” means metering which stores information relating to **electricity** consumption during **half hour** periods;

“**half-hour metering information**” means information recorded directly by a **metering installation** measuring the quantity of **electricity** conveyed every **trading period** during the **billing period** and adjusted to provide for **losses** as appropriate within the **local network**. For a **generator** which is selling **electricity** to the **clearing manager** and some other persons at the same **grid injection point** in the same **trading period**, **half-hour metering information** also includes the file recording the quantity of **electricity** sold to the **clearing manager** during each such **trading period** constructed in accordance with dispatch instructions issued by the **system operator** pursuant to the **rules**;

“**half-hour metering installation**” means a **metering installation** which uses **half-hour metering**;



“**high voltage terminal**” means the connection point where the higher voltage side of a **grid owner’s** transformer connects to the **grid**;

“**historical annual consumption**” means the annual consumption of a **grid exit point** or **grid injection point** for the 12-month period ended 3 months preceding publication of the **annual consumption list**;

“**HVDC injection point**” means the point at which **electricity** is injected into the **HVDC link**;

“**HVDC link**” means the converter stations at Benmore in the South Island and Haywards in the North Island and the high voltage transmission lines and undersea cables linking them (and including all associated equipment);

“**HVDC Owner**” means the **grid owner** who owns and/or operates the High Voltage Direct Current transmission that links the North and South Island **electricity** systems;

“**ICP**” means **installation control point**;

“**identification costs**” means any reasonable identification and testing costs incurred by the **system operator** in accordance with rule 2.5 of section II of part C which are unable to be recovered by the **system operator**;

“**implementation costs**” means the costs incurred or to be incurred by the **GSC** during the **Implementation Phase** in connection with the **Implementation Work Programme** (as further defined in MACQS), including without limitation, the legal, technical, economic and administrative costs of, or incurred by, the **Secretariat** and the **GSC**, and the fees for the independent chairperson and members of the **GSC** (or any of them);

“**incumbent retailer**” means a person listed in the register of **incumbent retailers** maintained by the **market administrator** under part G, section V, rule 10.1;

“**independent auditor**” means an auditor agreed by the **Board** and the **transmission provider** under part F, section III, rule 6.2 and appointed by the **Board** under part F, section III, rule 6.4 to assess whether the **transmission provider** has correctly applied the **confirmed pricing methodology**;

“**independent retailer**” means, subject to part G, section V, rule 11.2, a **retailer** who is not an **incumbent retailer**;

“**independent**” has the meaning set out in this annexure, rule 2.3;

“**infeasibility situation**” means a situation where the **software** used to determine **final prices** and **final reserve prices** calculates a model variable with a value (either positive or negative) as set out in the list given to the **pricing manager** pursuant to schedule G1, but excludes a **disconnected price situation**;

“**information system**” means the system or systems required for the conveyance of information between persons in accordance with the **rules** as may be approved from time to time by the **Board** in consultation with **members** and **service providers**;

“**inherent characteristics**” means the permanent and fundamental characteristics of an **asset** which are outside the reasonable control of the **asset owner** and affect the output or response of that **asset** and includes the effects of water temperature, ambient air temperature and performance during ramping on **asset** performance;

“**initial estimate**” means an estimate of **metering information** to be made by giving the **metering information** of all **members** of the **equivalent day** of the previous week;

“**injection**” means the flow of electricity from a **generator** at a **grid injection point** or a **local network** as the case may be;

“**input information**” means information given to the **pricing manager** in accordance with part G, section IV, rule 3.3;

“**installation control point**” means the point at which a **customer** is supplied with **electricity** and at which the supply of **electricity** may flow between the **local network** and the **electrical installation**, where the **electrical installation** inter-connects with an isolation device owned or controlled by the **distributor**;

“**instantaneous reserve**” means an **ancillary service** comprising one or more of the following: **interruptible load**, **partly loaded spinning reserve** or **tail water depressed reserve**;

“**interconnecting transformer**” means a transformer which allows for the transfer of power within the **grid** between any of the following voltage levels: 220 kV, 110 kV, 66 kV, and 50 kV, but excludes an transformer which is required to supply **demand** to **distributors** or **direct consumers**;

“**interrogation**” means the extraction or manual reading of stored data from a **metering installation**;

“**interruptible load**” means an ancillary service (**instantaneous reserve**) comprised of energy being consumed that is able to be disconnected to balance the injection **supply** and the **offtake** of **electricity** following a drop in system frequency to a specified level below 50 Hz;

“**investigator**” means any person appointed by the **Board** under rule 1.5 of section V of part A to investigate a complaint;

“**JIP**” means the Joint Industry Grid Security Project established and funded by **Transpower** to consider and develop the process by which members of the electricity industry can reach agreement on and secure the provision of the **common elements of quality**;

“**local losses**” means **losses** applying to the conveyance of **electricity** over a **local network**;

“**local losses criteria**” means, in the case of a **distributor**, its criteria on the allocation of **local losses** to users of its **local network**;

“**local network**” means lines, equipment and plant owned by a **distributor** that is used to convey **electricity** between the **grid consumer** or **embedded generator** or **embedded network** who are connected to that **local network**;

“**loss adjusted demand**” means the total demand determined by taking all actual demand **metering information** given to the **pricing manager** pursuant to part G, section IV, rule 3.2.2 and multiplying the total by 1.05;

“**loss compensation**” means the application of a predetermined **adjustment** or process to the data within or obtained from a **meter** or **metering installation** in order

to correct such data for known **losses** in primary plant such as power transformers, cables etc.;

“**losses**” means the difference between the delivered **electricity** at one **point of connection** and the **electricity** required to be injected into any other **point of connection** in order to supply the delivered **electricity**.

“**losses criteria**” means, in the case of Transpower New Zealand Limited, its criteria on the allocation of Transpower New Zealand Limited **losses** to users of the **grid**, and, in the case of a **distributor**, its criteria on the allocation of **local losses** to users of its **local network**, including in both cases the effect of any **constraint**;

“**loss of communication**” means a sustained disruption of communications between the **system operator** and the **control rooms** of one or more **dispatch customers**, such that operation of the **grid** is affected or is likely to be affected;

“**market administrator**” means the **service provider** for the time being who is appointed as administrator pursuant to part A, section VI, rule 2.1 or any other person to whom the **Board** gives a written delegation to carry out any duty of the **market administrator**;

“**MARIA**” means the Metering and Reconciliation Information Agreement;

“**Market Surveillance Committee**” means the independent panel appointed under **NZEM** with responsibility for supervision of the **NZEM** rules;

“**maximum continuous rating**” means the maximum electrical performance of an **asset** that can be maintained continuously in normal service;

“**member**” means any person who is admitted as a member in accordance with part A, section III, rule 1.5;

“**meter**” means an **active meter**, a **reactive meter**, or a **meter** that measures other quantities related to **active energy** and **reactive energy**;

“**metering equipment owner**” means the **member** who owns any or all of the items of metering equipment installed in a **metering installation**;

“**metering information**” means the quantity of **electricity** measured by a **metering installation** and adjusted for **local losses** (where relevant) to represent the equivalent amount of **electricity** at the **point of connection** with the **grid** and consolidated into a single quantity per **trading period**. Except in part G, section V, rules 2, 5.2 and 5.3 and in part H, rules 12, 13 and 15, **metering information** means **half-hour metering information**;

“**metering installation**” means **meters**, load and meter control devices (but not their control signals or means of generation), **data loggers**, test blocks, measuring transformers, error compensation processes, fittings, equipment, wiring, and installations used for the measurement and storage of **metering information** that is used for the purposes of the **rules**, and which comply with the standards set out in schedule D1 and in any relevant **codes of practice**;

“**metering situation**” means a situation where for the metering information to be given is incomplete or incorrect or is and remains an **initial estimate** for:

- (a) any **grid exit point** or **grid injection point** specified on the **annual consumption list** as having **historical annual consumption** greater than 500 GWh; or
- (b) any 2 or more **grid exit points** or **grid injection points** specified on the **annual consumption list** as having **historical annual consumption** greater than 300 GWh; or
- (c) 10 or more **grid exit points** or **grid injection points**;

“**metering standards**” means the standards for metering installation set out in schedule D1 and any relevant **codes of practice**;

“**metering testing requirements**” means those requirements set out in schedule D1 or any **code of practice**;

“**Minister**” means the Minister of Energy

“**model formulation**” means the model from which software specifications have been developed for the **system operator**;

“**must-run dispatch auction**” and “**auction**” means the auction conducted by the **clearing manager** under part I, section VI;

“**momentary fluctuations**” means any occurrence where the frequency of **electricity** deviates outside the **normal band** but is restored as soon as reasonably practicable;

“**MW**” means a megawatt of electrical power;

“**MWh**” means a megawatt hour of electrical energy;

“**national holiday**” means any day that Good Friday, Easter Monday, ANZAC Day, Queen’s Birthday, Labour Day, Christmas Day, Boxing Day, New Year’s Day, the day after New Year’s Day, and or Waitangi Day are observed for statutory holiday purposes;

“**negative sequence voltage**” means a measure of difference in magnitude and phase angle in each phase;

“**net grid exit point**” means a **grid exit point** or **grid injection point** in relation to which **electricity** flows out of the **grid** during the relevant **trading period**;

“**net grid injection point**” means a **grid exit point** or **grid injection point** in relation to which **electricity** flows into the **grid** during the relevant **trading period**;

“**net purchase quantity assessment**” means the quantity of an **ancillary service** derived from the following formula:

$$a = b - c$$

where:

a = the net purchase quantity of the **ancillary service** to be procured by the **system operator** in accordance with the **procurement plan**:

- b = the gross amount of an **ancillary service** that the **system operator** believes is required in order to meet the **principal performance objectives**;
- c = the amount of the **ancillary service** that is made available to the **system operator** pursuant to **alternative ancillary service arrangements**;

“**network supply point**” means a **point of connection** between two **local networks**;

“**New Zealand standard time**” has the meaning set out in the Time Act 1974;

“**non-member**” means a **generator, purchaser, distributor, grid owner** or **direct consumer** who is not a **member** of the **rules** or any part of the **rules**, but receives services or benefits which would be governed by the **rules** if that party were a **member**;

“**nominal voltage**” means the voltage at which particular equipment is designed to operate under normal circumstances;

“**normal band**” means a frequency band between 49.8 Hertz and 50.2 Hertz (both inclusive);

“**notified planned outages**” means those planned outages of **assets** forming part of or connected to the **grid** or **local network** which have been planned by the **asset owners** concerned and have been notified to the **system operator** in accordance with Technical Code A - Assets, including rescheduled or postponed planned outages which have been notified to the **system operator**;

“**notify**” means to notify the persons referred to in the relevant rule by way of letter, e-mail or facsimile, to a contact person and address provided by that person, that the information referred to in that rule has been **published**;

“**NSP**” means a **network supply point**;

“**NZEM**” means the New Zealand Electricity Market;

“**objectives and principles**” means the objectives and principles for transmission pricing specified by the Government in its most recent statement issued under section 26 of the Commerce Act 1986;

“**offer**” means the information submitted to the **system operator** by a **generator** in accordance with part G, section II, rule 3.1 and includes any revised **offer** made in accordance with part G, section II, rule 3.14, but excludes any **offer** cancelled in accordance with part G, section II, rule 3.14;

“**offer stack**” means the stack generated from ranking in price order, from lowest to highest, all **offers** to sell **electricity** as given to the **pricing manager** pursuant to part G, section IV, rule 3.3.3;

“**offtake**” means the flow of **electricity** from the **grid** at a **grid exit point**;

“**operating account**” means the trust account established by the **clearing manager** in accordance with part H, rule 8.11;

“**outage constraint**” means, in respect of a **grid** or **local network**, a restriction, including a restriction in the AC system, **HVDC system** or at any **point of**

**connection**, on the quantity of **electricity** that may be conveyed at any particular point on the **grid** or **local network**;

“**overall accuracy**” means the difference between the measured energy and the true energy after taking full account of all **compensations** deliberately set into any component or components of the **metering installation** and any **error compensation** which may be applied to the **raw meter data**. The quantity is expressed as a percentage of the true energy;

“**over frequency limit**” means the maximum frequency of 50.5 Hz;

“**over frequency reserves**” means an **ancillary service** that comprises an automatic reduction in the level of injection by a generating set to arrest an unplanned rise in system frequency;

“**participant**” means any person who has legal obligations under, and has agreed to be bound by, the **rules**;

“**partly loaded spinning reserve**” means an **ancillary service** (**instantaneous reserve**) consisting of spare capacity, held in reserve on a generation unit, generating but not operating at full output, which is able to provide **fast instantaneous reserve** or **sustained instantaneous reserve** following a drop in system frequency to a specified level below 50 Hz;

“**party**” means in section V of part A the **complainant**, the **investigator**, any **participant** allegedly in breach of the **rules**, and any **participant** who is prejudicially affected by the alleged breach and has given notice to the **Rulings Panel** of its interest, and the plural “**parties**” has a corresponding meaning;

“**peak month**” has the meaning in part H, rule 2.4;

“**point of connection**” means a point where **electricity** may flow into or out of the **grid** or a **local network**. For the purpose of **Technical Code A** “**point of connection**” means a **grid injection point** or a **grid exit point**;

“**point of measurement**” means a point on a **grid** or **local network**, or on a line connected to a **grid** or **local network**, at which the flow of **electricity** is measured by a **metering installation**;

“**point of supply**”, in relation to any premises, means the point at which fittings, used or intended to be used for the purposes of supplying **electricity** to those premises, enter those premises;

“**policy statement**” means a **draft policy statement** that has been **published** in accordance with part C, section II, rule 8.11, and which is still current;

“**pre-dispatch schedule**” means a schedule produced by the **system operator** with the characteristics described in part G, section III, rule 3.5;

“**Preliminary determination**” means a preliminary determination as defined under the transitional dispensation agreement;

“**preliminary sample**” means the statistical sample which is required in order to establish parameter estimates to determine the appropriate size of the **profile sample**;

“**preliminary sample size**” means the required size of the **preliminary sample**;

“**prescribed form**” means a form prescribed from time to time by the **market administrator**, or the **Surveillance Committee**, as the case may be;

“**pricing manager**” means the **service provider** for the time being who is appointed as pricing manager pursuant to part A, section VI, rule 2;

“**pricing methodology**” means the method by which prices are determined for a **transmission service** or a **service that substitutes for transmission**;

“**principal**” means any of the Principals from time to time under the Switching System Development Agreement referred to in part I, section V, rule 5;

“**principal performance objectives and PPOs**” means the **system operator** objectives set in part C, section II, rule 2;

“**procurement plan**” means a draft procurement plan that has been published in accordance with part C, section IV, rule 2.13 and which is still current;

“**profile**” means a fixed or variable **electricity consumption pattern** assigned to a particular group of **meter** registers;

“**profile acceptance limit**” means the maximum value allowed for the sample **coefficient of variation** calculated from the **preliminary sample**;

“**profile applicant**” means the **member** that submitted the application to the **market administrator** to introduce a new **profile**. The **profile applicant** can be a joint entity with more than one **retailer** for the purpose of **profile** application. It could also be an independent commercial entity acting on behalf of other **member**;

“**profile class**” means the grouping of one or more individual **profiles** that are applied to **metering installations** and loads with similar generic descriptions;

“**profile owner**” means the legal entity that introduced the approved **profile**. The **profile owner** has the right to apply the **profile** to (all) **consumers** on the **profile population** list, and the right to add **consumers** of other **member** to the **profile population** list;

“**profile population**” means all **consumers** included in a **profile**;

“**profile**” means a fixed or variable energy consumption pattern assigned to a particular group of **meter** registers;

“**profile sample**” means the statistical sample used to generate consumption data that is to be used to represent the load patterns of the entire group of **consumers** under the **profile**;

“**profile sample size**” means the required size of the **profile sample**;

“**promoter**” means (for the purposes of part F, section II) the party promulgating proposals for the provision of new services or to alter the service level of existing services;

“**proposal**” means a proposed **rule** change notified in accordance with part A, section IV, rule 1.1, as the case requires;

“**provisional marginal location factor**” means the factor that is determined by dividing the **provisional price** at any **grid exit point** or **grid injection point** by the **provisional price** at the relevant **reference point**;

“**provisional price**” means a price in dollars and cents that has been **published** based on data relating to a **provisional price situation**. When a **provisional price** is published it applies to all **trading member** of the relevant **trading day**;

“**provisional price situation**” means any circumstance where there is a **metering situation**, **SCADA situation** or an **infeasibility situation**;

“**provisional reserve price**” means a price calculated in dollars and cents that has been published based on data relating to a **provisional price situation**;

“**publish**” means, in respect of information to be published by the **Board** or any **service provider**, to make such information available through the **information system**. In respect of all other information “publish” means to make available in such manner as may be prescribed from time to time by the **Board**. The words “**published**”, “**publication**”, “**publisher**” and “**publishing**” have corresponding meanings;

“**purchaser**” means a person who buys **electricity** from the **clearing manager**;

“**qualifying preliminary determination**” means a **preliminary determination** which, as at the date in question, has not been suspended or revoked in accordance with the provisions of the **transitional dispensation agreement**;

“**raw meter data**” means the information in the form received directly from a **metering installation** and includes all factors relating to that data such as the k factor, m factor and loss factor;

“**reactive capability**” means the reactive power injection or absorption capability of **generating sets** and other reactive power resources such as Static Var Compensators, capacitors and synchronous condensers. This includes reactive power capability of a **generating set** during the normal course of the **generating set** operations;

“**reactive meter**” means a **meter** used for the measurement of **reactive energy**;

“**recalibrate**” means to carry out a **recalibration**;

“**recalibration**” means to repeat a **calibration** where a previous **calibration** has expired or become suspect;

“**recertification**” means to repeat a **certification** where a previous **certification** has expired or been cancelled;

“**recertified**” means having undergone **recertification**;

“**recertify**” means to carry out a **recertification**;

“**reconciled quantity**” means a quantity of **electricity** which has been reconciled by the **reconciliation manager**;

“**reconciliation information**” means information stating the amount of **electricity** supplied under, and the **losses** applied to, a **supply contract** for each **half hour** of a



**reconciliation period** (or such other period as has been agreed to) calculated from and reconciled with **metering information** and the relevant **losses**;

**“reconciliation manager”** means the **service provider** for the time being who is appointed as reconciliation manager pursuant to part A, section VI, rule 2;

**“reconciliation period”** means a calendar month commencing on and including the 1st day of each calendar month and ending on and including the last day of that month;

**“reference conditions”** means the conditions of temperature, frequency, voltage, humidity etc under which **meters** shall be tested;

**“reference point”** means:

- (a) for the North Island, the Haywards 220 kV bus which has the HVDC Pole 2 injection or offtake connected. If there is no Pole 2 injection or offtake connected, then the first indexed Haywards 220 kV node will be used; or
- (b) for the South Island, the Benmore 220kV bus which has the HVDC Pole 2 injection or offtake connected. If there is no Pole 2 injection or offtake connected, then the first indexed Benmore 220 kV node will be used;

**“reference standard”** means a measuring instrument that has been **calibrated** by an **approved calibration laboratory** and is not used as a **working standard**;

**“reform costs”** means those non-recurring costs incurred or to be incurred by **Transpower** from 1 August 1998 in facilitating and funding the JIP and leading to the design of the **MACQS** contract and the establishment of the initial GSC under **MACQS**. They are the costs that would not reasonably be viewed as creating a commercial asset or goodwill for **Transpower**, and would not be incurred by a new entrant wishing to be the **System Operator**. These costs include: the costs of The Marketplace Company Limited as advisers to the JIP including economic, governance and technical consultancy services, and legal, secretarial and administrative services; the fees of the chairman of the JIP; and costs incurred by **Transpower** including technical and economic consultancy fees, legal fees, filing fees and disbursements incurred in obtaining Commerce Commission approval, and the legal fees incurred in the establishment of the **MACQS** contract;

**“register”** means the register kept by the **system operator** for recording **equivalence arrangements** and **dispensations** and **alternative ancillary service arrangements**;

**“registry”** means the person for the time being appointed as the registry pursuant to part A, section VI, rule 2;

**“Regulatory Authority”** means any authority, body or person having responsibility for the regulation or supervision or enforcement of any law or regulation applicable to the **rules** or to dealing in contracts traded under the **rules**;

**“relative standard error”** means the error expressed as a percentage of the estimated parameter;

**“release”** means disclosure of information by a **service provider** to the **market administrator** expressly for the **market administrator** to **publish**. All information released to the **market administrator** will be:

- (a) in a written format and will set out the date and time of the release and the name, position and telephone number of an officer or employee of the **generator, purchaser or service provider** who can be contacted by the **market administrator** concerning the information;
- (b) marked in a prominent position with the words “For public release”;
- (c) sent by:
  - (i) facsimile on the letterhead of the **generator, purchaser or service provider** to a facsimile number specified by the **market administrator** for that purpose; or
  - (ii) by direct data transmission from an electronic address approved by the **generator, purchaser or service provider** to an electronic address and in a format specified by the **market administrator** for that purpose; or
  - (iii) in such other manner as may be agreed between the **market administrator** and the **generator, purchaser or service provider**;
- (d) released to the **market administrator**:
  - (i) if the information is not embargoed, as soon as practicable and where possible, not later than 1 hour prior to its public release; or
  - (ii) if a **generator, purchaser or service provider** chooses to use an embargo, no later than the release of the embargoed announcement to any other party, including the media. The times and conditions of embargo will be displayed prominently on every page of each release;

and the words “**releaser**” and “**releasing**” have corresponding meanings;

“**relevant section 26 principles**” means for the purposes of section II of part F, at any time, the objectives and principle in respect of the pricing of **transmission services** that are specified in the **section 26 statement** most recently published prior to that given time;

“**relevant information**” means at any time information received, or generated or held by a **generator, purchaser or service provider** about itself, including without limitation information about its **electricity** activities, plant, assets, generation capacity, **electricity** demand, contracts or financial position which:

- (a) upon its disclosure would, or would be likely to, materially affect the price of **electricity** or of any contracts relating to **electricity traded** under the **rules**; and
- (b) is not reasonably available to other **generators** and **purchasers** which actively **trade** in a form substantially as useable as the form in which it is available to that **generator** or **purchaser**;

“**relevant registration factor**” means the mean difference over time between **metering installation** readings and **check metering installation** readings at the relevant **grid exit point**;

“**republish**” means to revise and replace information that has already been **published**;

“**reserve offer**” means an offer of **instantaneous reserve** made in accordance with the provisions of part G, section II, rule 6;

“**resolution**” means a resolution of **members** passed by way of ballot held in accordance with schedule A5;

“**responsible party**” means the person responsible for the installation, maintenance, operation and **interrogation** of a **metering installation** and the supply of **metering information** to the **reconciliation manager**;

“**retailer**” means a person who supplies **electricity** to a **consumer** or to another **retailer** and includes an **independent retailer** and an **incumbent retailer**;

“**rule change**” means an amendment to or deletion of, or an addition to, any of the **rules** or any schedule to the **rules**, including any **code of practice** or **technical code**;

“**rules**” means the **rules** as amended from time to time and includes every schedule to the **rules**, any **code of practice** and any **technical code** and every amendment to deletion of, or addition to, any of the **rules**, any schedule, any **code of practice** or any **technical code**;

“**rulings panel**” means the committee established pursuant to part A, section V, rule 3.1;

“**sample date**” means the most recent date when the **profile sample** was drawn or updated;

“**SCADA**” means

“**SCADA situation**” means a situation where the **input information** to be given pursuant to part G, section IV, rule 3.3 is incorrect or incomplete. For certainty, where a reasonable estimate has been made by the **system operator** pursuant to part G, section IV, rule 3.3.1 no **SCADA situation** will exist;

“**schedule period**” means:

- (a) at any time prior to 1300 hours on any **trading day**, the remaining **trading periods** of that day; or
- (b) at any time after 1300 hours on any **trading day**, the remaining **trading periods** of that day together with each **trading period** of the next day;

“**schedule of dispatch prices and dispatch quantities**” means a schedule of **dispatch prices** and **dispatch quantities** prepared by the **system operator** in accordance with rule 5 of section III part G;

“**season**” has the meaning set out in part H, rule 2.4; and “**seasonal**” has a corresponding meaning;

“**seasonally-adjusted profile shape**” means an energy consumption pattern based on the net system load at each **network supply point**, where the scale of the profile shape is adjusted based on the (net) half hourly metered supply to that **network**

**supply point**, as measured against the (net) half hourly metered supply at that **network supply point** in April 1999;

**“section 26 statement”** means a statement of economic policy of the Government published in the Gazette by, or under the authority of the Minister of Commerce under section 26 of the Commerce Act 1986 (or any replacement for such section) that contains any objectives and principles relating to the pricing of **transmission services**;

**“service change”** means a change to an existing **service level**, or a new service, or a change to conditions surrounding the service, such as introducing penalties for non-performance;

**“service definitions”** means the descriptions of the **transmission services** provided or proposed to be provided by the **transmission provider** together with the contractual performance standards and liabilities applying to those **transmission services**, where such performance standards and liabilities are contained in an existing contract between the **transmission provider** and the **transmission customer**, or, for the purposes of section II of part F, may be part of a **service change** proposal notified by the **transmission provider** in accordance with rule 2.1 of section II of part F.;

**“service levels”** means the magnitude of the **service measure**;

**“service measures”** means the characteristics or features of the transmission service relevant to the transmission purchaser and transmission provider or **Transpower**;

**“service provider”** means the **system operator**, the **market administrator**, the **pricing manager**, the **clearing manager**, the **reconciliation manager**, the **registry** and any other person appointed as a **service provider** by the **Board** pursuant to part A, section VI, rule 2;

**“service that substitutes for transmission”** means a service that substitutes wholly or partly for a **transmission service** and that has or will be considered under part F, section II;

**“settlement”** means the informal resolution of a matter by agreement between a **complainant**, a **member** allegedly in breach and the **investigator**, as more specifically defined in part A, section V, rule 1.13;

**“settlement period”** means 57 **trading days**;

**“simple random sampling without replacement”** means the general procedure of drawing **consumers** from a **profile population** to form a sample. Each **consumer** in the **profile population** must have an equal probability of being drawn. Once a **consumer** is drawn, the probability of drawing the same **consumer** again must be zero;

**“single-line diagram”** means a schematic diagram of a **network interface**;

**“software”** means any software developed by or on behalf of a **service provider** which is used by that **service provider** to perform its obligations under the **rules** and which is listed in any schedule to the contract appointing the **service provider** as a **service provider** under the **rules**;

**“software proposal”** has the meaning set out in part A, section VIII, rule 4;

“**Statement of Investment Opportunities**” means the Statement described in rule 6.2 of section I of part F;

“**sub-block dispatch groups**” means that groupings of stations or units within a **block dispatch group** into subgroups to take account of any AC transmission system constraints as notified by the **system operator** in accordance with rule 3.6.2 or rule 4.6.10 of section III of part G;

“**submission expiry date**” means in the case of a submission on a **policy statement** the date notified by the **Board** in accordance with part C, section II, rule 8.9 and in the case of a submission on a **procurement plan** means the date notified by the **Board** in accordance with part C, section IV, rule 2.7;

“**subsidiary**” means a subsidiary as defined in section 5 of the Companies Act 1993;

“**sustained instantaneous reserve**” means the average MW provided between 0 seconds and 60 seconds to return the system frequency to the statutory requirements specified in the **Grid Operating Security Policy**;

“**supply**” means a measure of the rate of production of electrical energy;

“**synchronised**” means the condition whereby a synchronous machine is connected to a network and the electrical angular velocity of the machine corresponds with the network frequency and “**synchronise**” has a corresponding meaning;

“**system number**” means a coded number assigned to **assets** referred to in rule 2.1.1 of technical code A (part C) for the purposes of the **operation** of the **grid** and the management of the **assets** that, when used in conjunction with a locality name, uniquely identifies the **assets**;

“**system operator**” means the **service provider** for the time being who is appointed as system operator pursuant to part A, section VI, rule 3;

“**system operator approved fee rate**” means the rate for provision of services by the **system operator** as specified in the **system operator service provider contract** and amended from time to time in accordance with the process set out in that contract;

“**system security**” means the security and quality objectives set out in part C;

“**system security situation**” means any situation which the **system operator** believes on reasonable grounds is not adequately mitigated by the current **policy statement** and one of the following exists:

- the ability of the **system operator** to plan to achieve or to achieve the **PPO's** is at risk; or
- there is a risk of significant damage to **assets**; or
- public safety is at risk;

“**system test**” means a test conducted on **assets**, with that **asset** connected to the **grid**, to assess the interaction of that **asset** with the **grid**;

“**tail water depressed reserve**” means an **ancillary service (instantaneous reserve)** comprising a generating capacity on a motoring hydro generation set with no

water flowing through the turbine that is available following a drop in system frequency;

“**technical codes**” means the technical codes contained in schedule C3;

“**test facility**” means a device which permits access to voltage and current circuits for testing purposes while the **metering installation** is in normal service;

“**time block**” means a block of **trading periods** either from 1 to 16 (inclusive) or from 17 to 48 (inclusive) in each **trading day**. On the day that daylight saving ends “**time block**” means a block of **trading periods** either from 1 to 18 (inclusive) or from 19 to 50 (inclusive);

“**total auction revenue**” means for each **auction** the aggregate of all amounts payable by all **generators** in the relevant **time block**;

“**traceability**” is the property of the result of a measurement whereby it can be related to the SI units of measurement through an unbroken chain of comparisons, each with a stated **uncertainty**;

“**traceable**” means having the property of **traceability**;

“**trade**” means any activity carried out under the **rules** by a **generator** or **purchaser** including buying or selling contracts or parts of contracts, and the verb “**trade**” and the words “**traded**”, “**trades**” and “**trading**” have corresponding meanings;

“**trading day**” means the period from 0000 hours until 2400 hours on any day;

“**trading period**” means a period of 30 minutes ending on each hour or thirty minutes past each hour;

“**trading rights**”, in relation to a **generator** or **purchaser**, means the rights conferred on the **generator** or **purchaser** by the **rules** in relation to the use of the trading facilities of the **market administrator**;

“**Transitional dispensation agreement**” means the Agreement dated November 2001 between the Grid Security Committee and **Transpower** providing for **Transpower** to consider whether asset owners should be granted **dispensations** from compliance with **asset owner performance obligations** under the **rules**;

“**transmission price**” means an absolute dollar figure or a rate or an algorithm that determines the consideration for **transmission services** or a **service that substitutes for transmission services**;

“**transmission provider**” means a person that provides a **transmission service** or a **service that substitutes for transmission** (or who intends or wishes to provide such a service subject to a positive vote under part F, section II);

“**transmission purchaser**” means a **participant** that pays or that may be required to pay upon a positive vote under section II of part F, for any **transmission service** or **service that substitutes for transmission** which is the subject of the relevant rule, and **Transpower customers**;

“**transmission services**” means a service that involves, or is necessary for, the transmission of **electricity** from one **grid exit point** or **grid injection point** to any other **grid exit point** or **grid injection point**, but does not include any service specified under part C of the rules;

“**Transpower**” means Transpower New Zealand Limited, its subsidiaries or successors;

“**Transpower customer**” means any person to whom section 19(1) of the Electricity Amendment Act 2001 applies;

“**trustee shareholder**” means the trustee shareholder of [Electricity Governance Board] Limited, who holds the share or shares of [Electricity Governance Board] Limited on trust for the **members**;

“**type-testing**” means subjecting a sample or samples of a device to testing by an **approved test laboratory** accredited for the appropriate form of **type-testing** to verify compliance of that device with a prescribed standard or defined requirements and **type-test** and **type-tested** have corresponding meaning;

“**uncertainty**” means a parameter associated with the result of a measurement that characterises the dispersion of the values that could reasonably be attributed to the quantity being measured and must be determined to a confidence level of 95% or greater unless otherwise specifically stated;

“**under-frequency event**” means either;

- (a) an interruption or reduction of **electricity** injected into the **grid**; or
- (b) an interruption or reduction of **electricity** injected from the **HVDC link** into the South Island **HVDC injection point** or the North Island **HVDC injection point**;

whereby:

- (c) there is within any 60 second period an aggregate loss of **injection of electricity** in excess of 60 **MW** (being the aggregate of the net reductions in the **injection of electricity** (expressed in **MW**) experienced at **grid injection points** and **HVDC injection points** by reason of either (a) or (b)); and

such loss causes the frequency on the **grid** (or any part of the **grid**) to fall below 49.25 Hz (as will be determined by **system operator** frequency logging);

“**under frequency limit**” means the minimum frequency of 48hz for a contingent event;

“**undesirable situation**” has the meaning set out in part A, section V, rule 3.2;

“**unfavourable determination**” means an unfavourable determination as defined under the **transitional dispensation agreement**;

“**unit cost**” means the quantity calculated by dividing the product of the **consumer’s half hour** consumption and the corresponding **half hour NSP** prices over a defined time period by the sum of the **consumer’s half hour** consumption over the same period of time (note that the **half hour NSP** prices are based on the prices for trading at the **grid exit point** supplying energy to the **consumer**);

“**unoffered generation**” means **electricity** supplied from a station that is 1 **MW** or smaller in capacity that has not been offered for sale to the **clearing manager** pursuant to part G, section II, rule 3.1, but which is purchased by the **clearing manager**;

“**voltage support**” means an **ancillary service** comprising reactive power injection to the power system to boost voltage at the **point of injection**;

“**voting customers**” means those customers who have been admitted as **members** and includes **direct consumers**;

“**washup**” means the correction procedure followed as set out in part H, rule 15 when incorrect information, including **metering information**, has been used in preparing any **generator’s** or **purchaser’s** invoice;

“**working group**” means a committee selected by the **Board** under schedule A3, rules 1 to 5 and for the purposes of part F means a working group appointed under section I, rule 2.2;

“**working standard**” means a measuring instrument which has been **calibrated** by an **approved calibration laboratory** or an **approved test house**, and which is used routinely for the **calibration of meters** and **metering installations**;

“**year**” means a year commencing on the 1st day of April of each calendar year and expiring on the 31st day of March of the following calendar year;

“**zone**” means the points of service specified in the **technical codes** from time to time and at the commencement of these rules means any of the following points of service:

- (a) Zone 1 being all **points of service** in the North Island on circuits north of Huntly (excluding the Thames Valley spur);
- (b) Zone 2 being all **points of service** in the North Island not in Zone 1;
- (c) Zone 3 being all **points of service** in the South Island on circuits north of (and not including) Islington, Coleridge, Hororata and Papanui; or
- (d) Zone 4 being all **points of service** in the South Island not in Zone 3;



---

## Construction of these rules

---

### 2.1 General principles of construction

In these **rules**:

- 2.1.1 The singular includes the plural and vice versa;
- 2.1.2 The word “person” and words importing a person or persons include an individual, partnership, company, government department, statutory body or unincorporated body of persons;
- 2.1.3 The word “company” includes any corporation or other body corporate;
- 2.1.4 A reference to “directors” of a company is, in the case of a corporation or other body corporate, a reference to persons holding the corresponding office;
- 2.1.5 A reference to one gender includes any other gender;
- 2.1.6 A reference to a month is a reference to a calendar month;
- 2.1.7 Headings are included for convenience only and shall not affect the construction of the **rules**.
- 2.1.8 The expressions “in writing” and “written” include all means of reproducing words in a tangible and permanently visible form;
- 2.1.9 A reference to a statute or any statutory regulations is a reference to that statute or those regulations as amended from time to time, or to any statute or regulations which replace them, as the case may be;
- 2.1.10 Any term or expression which is defined in any **contract specifications** has the same meaning in the **rules** unless otherwise defined in the **rules**;
- 2.1.11 References in each part, section or schedule are references to **rules** in that part, section or schedule unless the reference expressly states otherwise;
- 2.1.12 Any **participant** who carries on the functions or business of a **generator, purchaser, distributor, grid owner** or **service provider** is, for the purpose of the **rules**, to be treated as a separate person for each such function or business notwithstanding that at law all or any of the functions or businesses may be carried on by the same person;
- 2.1.13 For the purpose of the contractual arrangements expressed in the **rules** as to the supply and conveyance of **electricity** by one **generator** or **purchaser** to another **generator** or **purchaser**, the supply and conveyance will be deemed to have been made notwithstanding that the physical flow of **electricity** from **generators** to **consumers** will not necessarily correspond with the contractual supply of **electricity** from **generators** to **purchasers**.

## 2.2 A special definition of “related”

For the purposes of the **rules** a person (the “first person”) is deemed to be related to another person (the “second person”) if the first person is so related to the second person by reason of any domestic or business relationship (other than because the second person is a customer of the first person) such that the first person can reasonably be expected to have influence over the second person’s judgment in trading or investment matters or to be consulted by the second person before any such judgment is formed, and if the first person is deemed to be so connected, the second person shall also be deemed to be related to the first person. No person shall be deemed to be related to any other where either person is a Shareholding Minister as that term is defined in section 2 of the State-Owned Enterprises Act 1986 or any other New Zealand legislation provided that person is acting in his or her capacity as a Shareholding Minister.

## 2.3 A special definition of “independent”

A person is deemed to be independent for the purposes of the **rules** unless that person:

- 2.3.1 is a director or employee of the **participant**; or
- 2.3.2 has a direct or indirect financial interest, whether legal or beneficial, and whether as shareholder, partner, or other equity holder, in a **participant**, other than an interest not greater than 0.1% of the equity capital or funds of the relevant entity or, where that entity is a subsidiary of another entity, of that other entity; or
- 2.3.3 is a director or employee of any shareholder, partner or other equity holder referred to in rule 2.3.3 of this schedule; or
- 2.3.4 is a person who regularly or from time to time trades, directly or indirectly, under the **rules**.

---

## **Guidelines for Settlements**

---

---

## **Cost Recovery Principles**

---