



T R A N S P O W E R

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26 February 2004

Transpower New Zealand Limited
System Operator
P O Box 1021
96 The Terrace
Wellington

For Attention : Kieran Devine

Dear Kieran

Grid Voltage Agreement

Rule 2.1 of Part I of the (draft) Electricity Governance Rules and Regulations ("EGRs") provides that where Transpower, as at the operational date of the EGRs, has an agreement or arrangement with any person to operate the grid voltage at a range lower than that set out in the AOPOs and enters into an agreement or arrangement with the System Operator to match such agreement or arrangement, then any incremental cost arising from the System Operator operating within a lesser range will not be allocated according to rule 6 of section II of part C of the EGRs.

Clause 4.1 of Part C of Transpower's Connections Contracts and Posted Terms for Connection to Grid Assets (together referred to as the "contracts") provides for the Point of Service Schedule to those contracts to contain a voltage table which includes, among other things, a Voltage Range Objective for each Customer Point of Service at which electricity is conveyed from the Grid Assets to the Customer's Assets. The voltage ranges which apply to some Customer Points of Service may cause the System Operator to operate the grid voltage within a lesser range than that set out in the AOPOs. This occurs at Customer Points of Service where the supply transformers have off-load tap changers installed, but may also occur where supply transformers have on-load tap changers installed.

Transpower therefore wishes to enter into an agreement ("the Agreement"), pursuant to Rule 6 of Section II of Part C with the System Operator which enables Transpower to maintain the voltage within the ranges contained in the contracts to enable any incremental costs arising from the System Operator in operating within the voltage ranges specified in such contracts to be allocated in accordance with the provisions in Part C of the EGRs relating to the allocation of ancillary service costs.

We have set out the terms and conditions of the Agreement below; if the System Operator accepts these, please sign this Agreement, and date and return the enclosed copy as acknowledgement and acceptance of the terms and conditions.

TERMS AND CONDITIONS

1. GLOSSARY AND INTERPRETATION

1.1 Glossary:

In this Agreement, unless the context otherwise requires:

"Arrangement" means:

- (a) a contract or arrangement which Transpower has with a person on the effective date of the Electricity Governance Regulations and Rules (EGRs) for voltage to be maintained within the Voltage Range Objective at that person's Point of Service; and
- (b) in relation to the Tiwai Point Connection Contract between Transpower and Meridian Energy Limited (TPCC), an obligation on Transpower to use Reasonable Endeavours as a Reasonable and Prudent Operator to maintain the voltage at the Point of Connection at the Nominal Voltage and, in particular, a steady voltage within the range of 213,000 volts to 228,000 volts. For the purposes of this paragraph 1.1(b), terms used which are defined in the TPCC have the same meaning as in the TPCC.

"Connection Point" means:

- (a) the high voltage terminals of the Grid Owner's transformers at each grid injection point and grid exit point; or
- (b) where no transformer exists, the relevant grid injection point or grid exit point.

"Normal Conditions" means:

in relation to a customer Point of Service, the following conditions as they relate to operation of the Grid Assets:

- (a) there are no outages having a material effect on the capability of the Grid Assets servicing the customer Point of Service;
- (b) where the operation of particular generating units may have a material effect on the customer Point of Service, sufficient of those generating units are available to be dispatched;
- (c) all connected parties whose operations may have a material effect on the customer Point of Service are materially compliant with the requirements of the Connection Policy and Part C of the EGRs;
- (d) core grid voltages having a material effect on the customer Point of Service are within the range of levels required by Part C of the EGRs.

"Point of Service" means:

an electrical busbar of a particular voltage where Transpower as the manager of the Grid Assets has agreed to provide services to one or more connected parties.

"Target Voltage" means

in relation to a customer Point of Service the nominal voltage at the bus of such other voltage as may be agreed between Transpower and the customer.

"Voltage Range Objective" means:

- (a) in relation to a customer Point of Service at which all supply transformers have on-load tap changers installed, $\pm 2.5\%$ of the Target Voltage for that customer Point of Service;
- (b) in relation to a customer Point of Service at which any supply transformer has off-load tap changers installed, $\pm 5\%$ of the Target Voltage for that customer Point of Service; and
- (c) in relation to any other customer Point of Service, the voltage range specified in Part C of the EGRs for the nominal voltage existing at that customer Point of Service.

1.2 Interpretation:

Any terms used in this Agreement which are defined in Transpower's Connections Contracts and Posted Terms (together referred to as "contracts") or in Part A of the EGRs, but are not defined in this Agreement, will have the same meaning as set out in the contracts, and Part A

of the EGRs, as the case may be. If a term is defined in both Part A of the EGRs and the contracts, the definition in Part A of the EGRs will apply.

2. TERM

2.1 Commencement:

This Agreement will take effect on the date of execution and will remain in effect until the later of:

- (a) the last of all of the Arrangements to expire; or
- (b) the last of all of the Arrangements to terminate; or
- (c) the end of the remaining life of the assets immediately employed in providing the voltage service in all of the Arrangements.

2.2 Expiry of each Arrangement:

For the avoidance of doubt, the obligations of the System Operator under paragraph 3 in relation to each Arrangement will expire on the earlier of the expiry, or termination of that arrangement, or the end of the remaining life of the assets immediately employed in providing the voltage service in that Arrangement.

2.3 Termination:

Notwithstanding clause 2.1 of this Agreement, either party may terminate this Agreement forthwith on an amendment to the EGRs which results in this Agreement not having regulatory status as currently given to it by Rule 2.1 of Part I of the EGRs;

3. SYSTEM OPERATOR'S OBLIGATIONS

3.1 Performance by System Operator:

The System Operator agrees that, subject to the performance of its obligations under the EGRs (including any direction issued to the System Operator by the Electricity Commission to correct any undesirable situation in accordance with the EGRs), it will use reasonable endeavours under Normal Conditions to maintain the grid voltage at the Connection Points in accordance with the Arrangement and within the ranges specified in Appendix A. For the avoidance of doubt, Appendix A is Transpower's operational specification to meet the Arrangement.

3.2 Excursion outside voltage ranges:

Where an excursion outside the voltage ranges specified in Appendix A has occurred and Transpower requests the System Operator to provide details of such excursion, the System Operator will report to Transpower on the duration and frequency of the excursion, together with details of any event which contributed to the excursion as soon as practicable after receiving Transpower's request.

3.3 Standard of care:

In carrying out its obligations under this Agreement, the System Operator will exercise the skill, diligence and efficiency which would reasonably be expected from a skilled and experienced system operator engaged in the co-ordination of an integrated transmission network under the same or similar circumstances as apply in New Zealand at the time.

4. TRANSPOWER'S WARRANTY

4.1 Warranty:

Transpower warrants for the term of this Agreement that it has an Arrangement in respect of each Point of Service associated with each Connection Point set out in Appendix A.

Transpower further warrants that each Arrangement will be in place on the operational date of the EGRs.

5. VARIATION

5.1 Variation to Agreement:

Subject to subclauses 5.2 and 5.3, there is to be no amendment to any of the provisions of this Agreement except by a supplementary written agreement signed by the parties. For the avoidance of doubt, an amendment to an Arrangement subsequent to the operational date of the EGRs will be deemed to constitute the termination of such Arrangement.

5.2 Variation to Appendix A:

- (a) Transpower will advise the System Operator of the expiry or termination of an Arrangement as soon as reasonably possible following the expiry or termination of such Arrangement. Transpower will revise Appendix A to reflect the expiry or termination of that Arrangement and will forward the revised Appendix to the System Operator forthwith.
- (b) In the event that the Rulings Panel determines that an Arrangement does not exist or that an Arrangement did not exist on the operational date of the EGRs, Transpower will revise Appendix A to remove such Arrangement from the Appendix and forward the revised Appendix to the System Operator forthwith.

5.3 Updates to Appendix A:

Transpower may review and update the information in Appendix A at any time in order to take into account seasonal and other load changes and provide the System Operator with a revised Appendix. The new Appendix A will replace the existing Appendix from the date specified by Transpower as the effective date at the time of providing the updated Appendix to the System Operator.

6. DISPUTES

6.1 Good faith:

Transpower and the System Operator undertake to use all reasonable efforts in good faith to resolve any dispute which arises between them relating to this Agreement.

6.2 Resolution:


Where a dispute arises between the parties, the party claiming a dispute must give notice of the dispute as soon as reasonably practicable to the other party, together with the grounds for the dispute. Both parties are to use all reasonable endeavours to resolve the dispute within 15 business days of receiving the notice of dispute. If the dispute is not resolved by the parties within 15 business days, the parties will jointly refer the matter to the Chief Executive Officer of Transpower for final resolution.

6.3 Continued Performance:

The System Operator will continue to perform its obligations under this Agreement until the dispute is resolved.

7. NATURE OF AGREEMENT

Transpower and the System Operator acknowledge that, while this Agreement is not legally binding and not able to be legally enforced by either of them because each is a single legal entity, each of them is entering into this Agreement in good faith, and intends to carry out its obligations under this Agreement as if it was.



Transpower New Zealand Limited

Acknowledged and agreed accordingly:



27 Feb 2004

System Operator

on:

(date)