

Greyhound

Memorandum of Understanding Integrated Gas Balancing Regime

MEMORANDUM OF UNDERSTANDING

DATED *2 December* 2009

BETWEEN

Contact Energy Limited
Genesis Energy Limited
~~Greymouth Petroleum Limited~~ *Greymouth Gas New Zealand Limited CB*
Maui Development Limited
Mighty River Power Limited
Multigas Limited
NZ Steel Limited
OMV Limited
Vector Gas Contracts Limited
Todd Energy Limited
Vector Gas Limited
Orana Limited CB

each a "party" and together the "parties",

AND ACKNOWLEDGED BY Gas Industry Company ("Gas Industry Co") in its capacity as convenor and facilitator of the ICD process (being the Industry Code Development process).

BACKGROUND

- A. Gas Industry Co has completed a review of the current transmission pipeline balancing arrangements in New Zealand and has determined that on the basis of the current facts a regulatory solution is necessary to provide efficient residual balancing of pipelines. Gas Industry Co is required to take into account the possibility of non-regulatory solutions as part of the process it follows in recommending new gas governance arrangements. The submissions received prefer non-regulatory solutions.
- B. At that time, Gas Industry Co also agreed to facilitate a parallel process aimed at developing a more integrated balancing regime, to be achieved primarily through changes to the existing contractual framework, and known as the ICD process which if successful may obviate the need for, or reduce the scope of, regulation.
- C. The parties have each committed to participating in the ICD process.
- D. As part of the ICD process and in furtherance of the parties' preference that an integrated balancing regime is based on contractual agreements rather than regulation, the parties have agreed principles and a package of changes and a timetable, set out in this Memorandum of Understanding and attached Schedules, that would provide for the introduction of an integrated balancing regime through changes to the existing contractual framework.
- E. The purpose of this Memorandum of Understanding is to provide a high level of confidence that an industry solution is achievable within an established timeframe.

PURPOSE AND STATUS

1. PURPOSE OF MoU

- 1.1 The parties wish to enter into this Memorandum of Understanding to record:
- (a) the intention of the parties with respect to the process for the development of the package of changes to the existing contractual framework as described in the attached schedules;
 - (b) Gas Industry Co's acknowledgement of those intentions; and
 - (c) each party's support for the intended changes.

2. STATUS OF MoU

- 2.1 Although this Memorandum of Understanding is intended to reflect the parties' good faith intentions and support for the package of changes set out in the attached schedules, at the date of this Memorandum of Understanding, nothing in this Memorandum of Understanding is intended to create any legally binding obligation on any party.

3. INDUSTRY CODE DEVELOPMENT PROCESS

- 3.1 In December 2009, Gas Industry Co intends to recommend to the Minister of Energy whether or not to regulate unified residual balancing of gas transmission pipelines.
- 3.2 Each of the parties prefers an integrated balancing regime based on the development of the contractual framework, rather than based on regulation.
- 3.3 The parties have a vision of an integrated balancing regime extending across the whole transmission system.
- 3.4 The parties recognise that this vision will take time to achieve, and is not achievable before December 2009 when Gas Industry Co will recommend whether or not to regulate for residual balancing.
- 3.5 Accordingly, the parties have developed a package of changes, to be implemented through changes to the contractual framework, and intend that all changes impacting the flow of balancing charges between parties are to come into effect on 1 October 2010.

4. PRINCIPLES AND PROCESS FOR CONTRACTUAL CHANGES TO CODES

- 4.1 The parties agree that the package of changes that would provide for the introduction of an efficient integrated balancing regime through the contractual arrangements reflects the following principles:
- The balancing operator(s) will operate, as a Reasonable and Prudent Operator(s) (RPO) to clear pre-defined policies and operating procedures when making decisions on the need for a balancing action.
 - The balancing operator(s), as a RPO, will procure balancing services through a balancing market at least cost on an arm's length basis. It is the parties' view that the balancing gas trading platform currently in operation can be developed to meet this requirement.
 - The balancing market will be open to all eligible providers of balancing services.
 - Balancing costs will be recovered on a pay-first-dispute-later basis and, as far as possible, will be allocated to parties that cause the balancing actions.
 - Good information and balancing tools will be made available to all transmission system users to minimise the need to draw on balancing services.

- Balancing activity will be transparent and subject to full reporting and audit processes.
- 4.2 The changes needed to the contractual framework to meet the principles set out in paragraph 4.1 above have been defined (in detail or at a general level) and are described as 'expected content' in the attached Schedules.
- 4.3 The parties each support the package of changes to the contractual framework as described in the attached Schedules.

5. GENERAL

- 5.1 Each party shall bear its own costs in preparing this Memorandum of Understanding and attached Schedules any work carried out in relation to the development of the changes to the contractual framework.
- 5.2 Unless expressly agreed to the contrary, no matters discussed in relation to the matters set out in this Memorandum of Understanding will be confidential.
- 5.3 *Should the ICD process be discontinued, this document and the attached schedules shall be null and void.*

Signed for

Company: Greyhound Gas New Zealand Limited

By: Chris Boxall

Job Title: Commercial Manager

Date: 2 December 2009



Acknowledged by

Gas Industry Company

Schedules 1-6

Schedule 1

The balancing operator(s) will operate to clear pre-defined policies and operating procedures when making decisions on the need for balancing action.

I. Appointment of balancing operator(s) and recovery of costs of balancing arrangements

Expected content:

- Balancing operator(s) will be contracted and appointed for each pipeline by the pipeline owner, and may be removed and reappointed, in respect of the Maui pipeline by MDL and the Vector pipelines by Vector. The balancing operator(s) may be agents for the pipeline owners, or principals by contract.
- The net costs of establishing, operating and monitoring the balancing arrangements will be funded by new components of the pipeline tariffs. For the Maui pipeline the balancing operator's costs will be payable by Maui pipeline users and for Vector pipelines by Vector pipeline users. These costs will include the remuneration and expenses of the balancing operator(s), the costs associated with premises, IT etc., and the costs of obtaining prudential, insurance and other securities/assurance. Any unallocated or unpaid balancing costs and peaking charges on the Maui and Vector pipelines respectively will be recoverable by a tariff specific to the pipeline and paid so that users on one pipeline do not subsidise users on the other.
- The MPOC and the VTC will be reviewed and changed to take account of the changes noted above, and of the role and function of the balancing operator, including any distinction in the service definition between transportation and balancing.

→ which reflects a fair cost allocation model taking into account the principles in this document CB

(Such tariff to reflect a fair cost allocation model that takes into account the principles in this document) CB

II. Role of the balancing operator(s)

Expected content:

The role of the balancing operator(s) will be fully described in the MPOC and VTC (as appropriate), and is to:

- Manage line pack, as an RPO, on an actively managed balancing zone by buying and selling balancing gas in accordance with Standard Operating Procedures (SOPs);

- Provide or procure access to a balancing gas trading platform;
- Allocate costs and GJs of purchased balancing services to causers of balancing actions in accordance with the relevant code;
- Manage the commercial arrangements for participation on a balancing gas trading platform;
- Notify and apply any cap and floor prices for balancing gas;
- Buy and sell balancing gas and receive and pass title to that gas;
- Invoice and provide credit control on the sales of balancing gas services;
- The balancing operator(s) will buy and sell balancing gas through the process outlined here on an arm's length basis and without prejudice or favour to any buyer or seller of balancing gas; and
- The balancing operator(s) will disclose the following information:
 - the process for entering bids to buy and sell balancing gas;
 - the volume and price of offers of balancing services for a day prior to the commencement of that day; and
 - all balancing gas puts and balancing gas calls entered into by the balancing operator(s).

III. Defined policies and operating procedures of the Balancing Operator

Expected content:

- MDL and Vector will develop SOPs to describe how the line pack of the Maui and Vector pipelines respectively will be managed in a coordinated manner.
- The SOPs will be developed by MDL and Vector in consultation with users.
- The SOPs will address:
 - the circumstances in which the balancing operator(s), as a RPO, will buy or sell balancing gas;
 - the balancing operator(s) scope to exercise discretion, and the means of providing transparency to those decisions;
 - the process for setting any cap and floor prices;
 - the allocation of balancing costs in accordance with the codes;

151988.1

based on line pack
trigger puts CB
and based on the "back-to-back"
concept CB

CB

- coordination of balancing policy for interconnected transmission systems; and
- critical contingency interfaces.
- The SOPs will be subject to SOP change request procedures contained in the relevant transmission code. These procedures will allow for:
 - timely determinations;
 - independent overview;
 - all users of the relevant transmission system to request changes and to participate in consultation; and
 - all change requests, submissions and determinations to be published.

Schedule 2

The balancing operator(s) will procure balancing services through a balancing market at least cost on an arm's length basis. It is the parties' view that the balancing gas trading platform can be developed to meet this requirement.

I. Procurement of balancing services

Expected content:

The relevant TSOs will develop code change requests to provide for:

- the balancing operator(s), acting as a RPO, will use all reasonable endeavours to buy and sell balancing gas in accordance with the following principles:
 - the balancing operator(s) will buy and sell balancing gas services on a least cost and greatest revenue basis by first accepting the lowest priced offer(s) of call gas or first accepting the highest priced offer(s) of put gas available on a day;;
 - the balancing operator(s) will calculate and apply the cap and floor prices as set in the relevant code;
 - the balancing operator(s) may be the shipper of balancing gas; and
 - the balancing operator(s) will buy and sell balancing gas on an arm's length basis;
- the balancing operator(s) will publish on a balancing gas website the standard terms and conditions upon which balancing gas calls are bought and balancing gas puts are sold by the balancing operator(s). Such standard terms and conditions shall, without limitation, provide for the following criteria:
 - passing of title to balancing gas sold and purchased under each balancing gas put and balancing gas call entered into by the balancing operator(s);
 - the timeframes and procedures for the notification of requests for balancing gas calls and balancing gas puts and the price of such transactions;
 - the timeframes and procedure for the notification of acceptance of balancing gas calls and balancing gas puts;
 - invoicing and payment procedures for balancing gas puts and balancing gas calls;
 - rules for the operation of the balancing gas trading platform;

- liability for failing to perform the obligations under the terms and conditions governing balancing gas calls and balancing gas puts; and
- publication of any non-standard terms and conditions.

II. Determination of the price of balancing gas

Expected content:

- Balancing service providers will receive (or pay) the price they bid into the balancing gas trading platform (if their bid is accepted).
- The balancing gas cash out-price on each day will be set at the volume weighted average price of all offsetting balancing gas market transactions on that day.

Schedule 3

The balancing market will be open to all potential providers of balancing services.

I. All transmission system users will have opportunity to provide balancing services

Expected content:

- Vector will introduce, implement and operate a daily nominations regime, and, ~~except as noted below, Operational Balancing Agreement (OBA) allocation and title transfer and tracking on its pipelines.~~ ^{CB}
- The balancing gas trading platform shall be open to welded parties and shippers on the Maui pipeline (other than welded parties at Small Stations and the Rotowaro, Pokuru and Pirongia Welded Points whilst they remain combined, and shipments made to and from those welded points).
- The balancing gas trading platform will also be open to shippers and interconnected parties on the Vector pipelines once all of the following conditions are fulfilled:
 - Vector has introduced and, implemented daily nominations and ~~OBA allocation and title~~ ^{CB} as above;
 - the shipper complies with all MPOC shipper information and communications requirements and the relevant interconnected party complies with all MPOC welded party information requirements;
 - the shipper and relevant interconnected party make all other arrangements as are necessary or appropriate with Vector; and
 - either:
 - Vector agrees to pay, on a pay-first-dispute-later basis, all balancing costs and peaking charges at the relevant Transmission Pipeline Welded Point (TPWP); or
 - all the shippers in the balancing zone downstream of that TPWP, including Vector in respect of its fuel gas, UFG and linepack changes, enter into all arrangements required for the unbundling of the OI, and the allocation, payment (on a pay-first-dispute-later basis), and recovery of all balancing costs and peaking charges, at the relevant TPWP.

[There were differing views on whether Vector, the users or another entity would in the first instance agree to pay (on a pay-first-dispute-later basis) all balancing costs and peaking charges at the relevant TPWP.]

- To maximise balancing market participation offers of balancing services shall be accepted as late as reasonably possible.
- The prerequisites for participation on the balancing gas trading platform are that:
 - participants have accepted the terms of the balancing gas trading platform and signed the necessary contracts;
 - any delivery point or receipt point where balancing service is provided meets the MPOC metering standards;
 - nominations for delivery and receipt at TPWPs will be linked to enable title tracking and facilitate the effective management of any curtailment; and
 - users and the balancing operator(s) will exchange information to determine the provision of service.

II. Cost allocation issues relating to TPWPs

Expected content:

- Subject to OI unbundling at TPWPs successfully being completed, in respect of balancing the Maui balancing operator will deal directly with:
 - Large Stations^{1,2,3} within each Vector balancing zone on the Vector transmission system;
 - the Welded Party in respect of any Pooled Delivery Point (which point will aggregate all non-TOU and mass market users and any non-compliant Large Stations within the balancing zone); and
and any non-mass market TOU users^{CB}
 - Vector in respect of its fuel gas, UFG and linepack changes within that zone.

[There were differing views on whether Vector, the users or another entity would be the notional Welded Party in respect of any Pooled Delivery Point.]

- Flows will be measured at Large Stations by meter, with respect to the Pooled Delivery Point by inferred meter, and with respect to pipeline fuel gas, UFG and linepack changes by whatever means is appropriate, including calculation.
or multi-user large station^{CB}

¹ The term 'Large Station' refers to a station with the characteristics of a Large Station as defined in the MPOC.

CB 2 Should there be more than one user at a Large Station, one party will need to become the notional welded party and the issue of whether or not this makes that party a balancing operator will need addressing. A decision must also be made as to whether the Maui balancing operator deals with the Large Station or with the shipper/s to that Large Station. *CB*

- There must always be a party responsible for allocation of gas and title for a Pooled Delivery Point. That party will be responsible and liable for balancing charges at the Pooled Delivery Point. ~~That party may allocate responsibility and liability for balancing charges at the Pooled Delivery Point to the shippers or the interconnected parties using that Pooled Delivery Point.~~ CB
- Prior to OI unbundling at TDPs successfully being completed, in respect of balancing, the Main balancing operator will deal directly with welded parties attached to the Main system, and the Vector balancing operator will deal directly with users who use such relevant welded Point. CB

Schedule 4

Balancing costs will, as far as possible, be allocated to parties that cause balancing actions.

I. Core allocation issues

Expected content:

- Balancing costs in respect of cash-outs will:
 - only occur on days where the balancing operator(s) has bought or sold balancing gas;
 - be calculated daily, at the end of each day (as defined in the MPOC and VTC);
 - be allocated to each MPOC welded party and each VTC shipper in proportion to running imbalance positions and up to the limit of their excess contributing OI position; and
 - in aggregate, not exceed the quantity of offsetting balancing gas bought or sold on the balancing gas trading platform.
- Balancing gas cash-outs will occur without notice at the end of each day.
- Any balancing costs not recovered through cash-out will be recovered through peaking charges or other mechanisms.
- Imbalance Limit Overrun Notice (ILON) arrangements will be deleted from the MPOC.
- The MPOC and VTC will make provision for WP claims, in the event the WP is unable to receive or deliver gas.

(with peaking charges at TPWPs only valid if users have the fair and reasonable ability to prove or disprove contribution to such peaking charges) CB

II. Adjustment of allocations

Expected content:

- Provision will be made for corrections to balancing costs and peaking charges that result from metering corrections and downstream allocation revisions.

[There were differing views on whether the allocation of balancing costs and peaking charges should be adjusted retrospectively where errors were identified.]

III. Tolerances

Expected content:

- Tolerances will be reduced to minimise extent of socialisation of costs.

^{CB} but not to the extent that such reduction imposes more costs on users individually or collectively than such reduction saves in socialised costs.

[There were differing views on whether tolerances should be eliminated or a small tolerance be retained to minimise transaction costs.]

IV. Unbundling OI

Expected content:

- MDL and Vector will propose amendments to the MPOC, the VTC and to Vector's Interconnection Agreement (ICA) to unbundle Vector TPWPs and to create direct obligations as between shippers on the Vector pipelines and the balancing operator(s).
- The unbundling of OI at Vector TPWPs will be subject to:
 - direct liability of the shippers or Vector to the balancing operator(s) for their individual imbalance;
 - payment of allocated Balancing Costs and Peaking Charges on a pay-first-dispute-later basis providing shippers and Vector have full rights to participate in resolution of those disputes;
 - prudential security and assurance;
 - each shipper and Vector having a reasonable endeavours obligation to balance each day and throughout a day; and

- otherwise, conditions of the kind noted in respect of the opening of the balancing gas trading platform to users on the Vector pipelines above.
- Small stations on the Maui pipeline will be reviewed to see if tracking OI is justified.
- For the purpose of balancing, the Rotowaro, Pokuru and Pirongia welded points will be unbundled by MDL.

V. Transmission system UFG

Expected content:

- Transmission system UFG will be managed in a coordinated manner across both pipeline systems;
- Transmission system UFG will be bought or sold at regular intervals; and
- Transmission system UFG will be accounted for explicitly. *and at no stage will this count as balancing gas CB*

[There were differing views on whether MDL should be liable for UFG.]

VI. Allocation of balancing charges to TSOs

Expected content:

- TSOs will be allocated balancing charges for imbalances arising from:
 - UFG;
 - fuel gas; and
 - management of linepack.

[There were differing views on whether MDL should be liable for fuel gas, UFG and linepack changes.]

VII. Financial risk for Balancing Operator(s)

Expected content:

- Pay-now-dispute-later principle will apply to payment of balancing costs, peaking charges and balancing tariff charges;
- Prudential requirements under the MPOC and VTC will be reviewed to reflect the new balancing arrangements and proposed balancing tariff;
- Default interest will apply on unpaid and disputed amounts; and
- Parties subject to the pay-now-dispute-later principle will have the right to invoke dispute resolution procedures to recover disputed payments.

Schedule 5

Good information and balancing tools will be made available to all transmission system users to minimise the need to draw on residual balancing services.

I. Information for users

Expected content:

- There will be a general principle of transparency that will apply to TSOs and all pipeline users.
- The balancing arrangements will provide that the balancing operator(s) will publish:
 - during and following each transmission day, a full range of information to facilitate balancing;
 - following each transmission day, a full range of information to allow it to confirm balancing actions; and
 - the information published will include metered and scheduled quantities for each user and the cost and revenue resulting from the balancing actions;
- The balancing operator(s) will conduct their operations transparently.
- There will be an annual audit of balancing gas transactions. The cost of the audit will be recoverable via the proposed balancing tariffs. The terms of reference and results will be published.
- Any party or parties may require a performance audit. The cost of that audit will be met by that party or parties.
- The purpose of a performance audit is to assess any aspect of:
 - the performance of the balancing operator(s) in terms of compliance with codes and procedure; and
 - the systems and processes of the balancing operator(s) that have been put in place to enable compliance with codes and procedures.
- The person appointing the balancing operator(s) must appoint as auditor a person who is independent to and not in a position of conflict of interest with the balancing operator(s) or a transmission system owner.

- In conducting an audit, the auditor must not consider any action, circumstance, event, or inaction that occurred 24 months or more before the date the audit was requested.
- The auditor may:
 - request any information from the balancing operator(s), the industry body, any transmission system owner and any user; and
 - request to examine any processes, systems and data of the balancing operator(s), provided such processes, systems and data are directly relevant to the performance of the balancing agent in terms of compliance with the codes and procedures;
- Any request by the auditor must be reasonable and strictly for the purposes of the audit.
- In providing information to the auditor, a transmission system owner, the balancing operator(s) or a user may indicate to the auditor where such information is considered to be confidential.
- The timing, number and notice periods for intraday nomination opportunities will be periodically reviewed to assist pipeline users to effectively manage their balance positions.
- CB • TSOs must provide unvalidated and validated Wadded Point and Gas Gate data, each day, to users.

II. Balance corrections

Expected content:

- A process will be developed to allow users to signal intentions to reduce imbalance (i.e. distinguish between the balancing versus demand components of their nominations).
 non-bidding CB

III. D+1 allocations

Expected content:

- If a D+1 algorithm can be developed which will provide allocations closer to the 'interim' allocation than the 'initial' allocation, all gas deliveries will be allocated to MDL and Vector users on the day after gas flow using that algorithm. For clarity, these algorithms only apply within a Pooled Delivery Point and have no effect or relevance as far as the balancing operator(s) is concerned.
 CB for users individually and collectively
- D+1 implementation must also pass a cost/benefit test and costs of any such regime will be recovered from beneficiaries.

IV. Access to balancing tools by users across whole transmission system

Expected content:

- Once the prerequisites to participation on the balancing gas trading platform and unbundling of OI at TP Welded Points have been met, it is intended that all eligible participants on the Vector pipelines will have equivalent rights and obligations as MPOC welded parties including:
 - right to manage imbalance effectively at point of interconnection on a Vector pipeline but (legally and in fact) at the unbundled TP Welded Point;
 - right to renominate through MPOC intraday cycles as provided for in the MPOC;
 - allocation of tolerance; *CB fair to users to whom such tolerance will make a material positive difference CB*
 - rights and obligations equivalent to those under s15 of the MPOC upon evidence of compliance;
 - right to trade imbalance; and
- The timing, number and notice periods for intraday nomination opportunities will be periodically reviewed to assist pipeline users to effectively manage their balance positions.

Schedule 6

Balancing activity will be transparent and subject to full reporting and audit processes.

I. Dispute resolution process

Expected content:

- Disputes will be resolved by an independent process, if not resolved between the parties within 10 working days and any party to the dispute requests referral to the process. The process will provide for:
 - disputes to be heard by an appropriately qualified authority;
 - timely resolution;
 - low cost determinations; and
 - redress in the event a party considers determination is wrong in law.

