



CONSULTATION PAPER

Gas Transmission Access Single Code Options Paper - Part 1

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Executive Summary

Single new transmission access regime is being developed

The gas transmission systems, previously owned by Maui Development Limited (MDL) and Vector Gas Limited, are now owned by First Gas Limited (First Gas). First Gas wishes to replace the Maui Pipeline Operating Code (MPOC) and Vector Transmission Code (VTC) with a single new access regime that will cover the combined gas transmission system, with effect from 1 October 2018.

Gas Industry Co is working with First Gas to ensure that new access arrangements can be developed through an inclusive process that allows for full consideration of stakeholder views, and which is robust from a regulatory perspective.

Gas Industry Co's role in the development process

Transmission access is a vital component of the gas market. This is recognised in the Gas Act which sets out a number of objectives specifically related to transmission access arrangements. As 'industry body' under the Gas Act, Gas Industry Co will ultimately have a responsibility to assess the extent to which any new access arrangements will meet those objectives, and whether we should recommend any regulations to the Minister.

Given previous difficulties the industry has experienced in improving transmission access arrangements, industry participants have indicated a strong preference for Gas Industry Co to work closely with stakeholders, including First Gas, to ensure that there is no unnecessary delay or duplication between the First Gas process and Gas Industry Co's regulatory process.

Accordingly, First Gas and Gas Industry Co have agreed to co-lead the new code development work, with complementary responsibilities for different aspects of the process. Gas Industry Co being careful at each stage not to compromise its regulatory role.

Regulatory objective that Gas Industry Co expects to apply

As an initial step, Gas Industry Co believes it is useful to set out the regulatory objective that we expect to apply when assessing any new transmission access arrangements.

The proposed regulatory objective is:

To promptly establish a new non-discriminatory gas transmission open access regime to replace the MPOC and VTC that facilitates:

1. efficient operation of the transmission system and use of pipeline capacity;
2. competition in upstream and downstream markets; and
3. efficient investment in pipelines.

Definition of services expected to be a core issue

The existing access arrangements cover a broad range of matters – from fundamental issues through to highly technical matters.

At this early stage of the development process, it would be inappropriate for Gas Industry Co to set out specific expectations for each of the matters covered by access arrangements. Rather, we expect to assess the new arrangements as a whole, against the objectives and outcomes in the Gas Act and GPS.

Having said that, Gas Industry Co expects to give particular attention to the definition of services and related issues, e.g. whether transmission capacity is available on a firm and/or non-firm basis, how capacity is allocated if there is excess demand, what information is available to users about pipeline capacity etc. Previous work suggests that these matters are likely to be fundamental to the design of a compliant code.

Gas Industry Co notes that the industry has already done a lot of work in this area, particularly the work of the Panel of Expert Advisers (PEA). We suggest that the guiding principles proposed by the PEA are still valid, and consistent with the Gas Act and GPS objectives/outcomes.

In broad terms, the PEA's work suggests that a new transmission access regime should ideally:

1. Provide for a menu of transmission services, both firm and non-firm rights, where firm rights are;
 - (a) tradeable; and
 - (b) allocated on a willingness to pay basis when scarce.
2. Provide full disclosure of information on pipeline capacity and related issues.
3. Include a nominations regime (at least for those zones where congestion is possible) with incentives for parties to give accurate nominations.
4. Transition away from grandfathering arrangements that give preferential renewal rights to incumbent users.
5. Provide price signals to indicate scarcity where possible.
6. Allocate any congestion rents in a way that minimises distortions to long-term bidding for firm capacity and short-term incentives.
7. Recover the costs of making information transparent, and establishing a single access regime, from a broad base.
8. Be supported by efficient governance arrangements.

Next steps

This paper will be presented at a workshop on 20 September, 2016. You will find details of the workshop and the registration instructions here: <http://gasindustry.co.nz/work-programmes/transmission-pipeline-capacity/developing/>

In the body of this paper and at Appendix C we have set out a series of questions on which we are keen to receive stakeholder views.

We also welcome any other feedback on the issues canvassed in this paper.

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1. Introduction and background

Since earlier this year both of New Zealand's open access transmission systems – the Maui and Vector pipelines – are now owned by a single company: First Gas Limited (First Gas).¹

The terms of access to the Maui and Vector pipelines are set out in the Maui Pipeline Operating Code (MPOC) and the Vector Transmission Code (VTC). Some problems have been identified with these access regimes which Gas Industry Co and stakeholders have tried to resolve over a number of years, most recently by seeking ways to 'converge' the codes.

Managing two access regimes will be a significant inefficiency for the industry, so First Gas wishes to develop a single access regime across all its transmission pipelines, specified in a single new transmission code.

Transmission access is a vital component of the gas market. This is recognised in the Gas Act which sets out a number of objectives specifically related to transmission arrangements. As 'industry body' under the Gas Act, Gas Industry Co has a responsibility to ensure that any new arrangements meet those objectives. In addition, if it is not possible for First Gas and transmission system users to agree new arrangements, Gas Industry Co will need to consider if recommending regulation to the Minister is justified.

Given previous difficulties the industry has experienced in improving transmission access arrangements, industry participants have indicated a strong preference for Gas Industry Co to work closely with stakeholders, including First Gas, to ensure that there is no unnecessary delay or duplication between the First Gas process and Gas Industry Co's regulatory process. Accordingly, First Gas and Gas Industry Co have agreed to co-lead the new code development work. However, Gas Industry Co will be careful at each stage not to compromise its regulatory role, including by maintaining sufficient independence.

In a Memorandum² dated 12 August, 2016, First Gas proposed a programme for a single code development process. Gas industry Co and First Gas held a stakeholder workshop on 24 August 2016 to discuss the proposal and received feedback that the programme required more 'granularity' and needed to show how Gas Industry Co's regulatory responsibilities would dovetail with the code development work.

In Gas Industry Co's 6 September 2016 News Bulletin, stakeholders were invited to another workshop on 20 September 2016. Supporting material included the following timeline for identifying and considering the options for new gas transmission access arrangements.

¹ On 20 April 2016, Vector Gas Limited – owner of the Vector transmission system – was acquired by First State Funds, two infrastructure funds managed by First State Investments, known in Australia as Colonial First State Global Asset Management. Vector Gas Limited was renamed First Gas Limited (First Gas). Then, on 15 June 2016, First Gas purchased the Maui pipeline from Shell, Todd and OMV (collectively known as the Maui Mining Companies).

² [First Gas Memorandum](#)

Table 1 **Timeline for identifying and considering options**

Actions	Date
Agree GIC/MBIE/First Gas process expectations	Early September 2016
GIC to issue a consultation paper proposing a regulatory objective, providing background information including a summary of the Panel of Expert Advisers work, and describing how GIC's process will interface with the First Gas process	Mid-September 2016
First Gas meetings with individual stakeholders	September – October 2016
Identification of access and pricing options	September – December 2016
Identification of IT options	October-November 2016
GIC and First Gas to issue options paper on new transmission access regime options	Late November 2016
Submissions on the options paper is planned to close	16 December 2016
GIC to host 3 stakeholder workshops, the first principally to discuss its mid-September consultation paper, the second for First Gas and GIC to discuss and develop proposals for reasonably practicable options, the third principally to discuss the options paper	20 September 2016
	9 November 2016
	5 December 2016

It was noted that this timetable is ambitious but that there is broad industry support for moving efficiently through the process, and considerable preparatory work had been done over recent years which would be traversed in a mid-September consultation paper.

This paper – *New Gas Transmission Access Single Code Options Paper Part 1* (SCOP Part 1) – is the mid-September consultation paper referred to in the timeline. It builds on the preliminary stakeholder discussions, and also provides foundation material to underpin the consideration of the reasonably practicable options for a single gas transmission access regime. It will be discussed at the 20 September workshop and submissions on SCOP Part 1 are invited by 5pm on Friday 7 October.

The layout of SCOP Part 1 is:

Chapter 2 – Proposed regulatory objective

Chapter 3 – The existing codes

Chapter 4 – Scope of options

Chapter 5 – Process for developing new transmission access arrangements

Glossary

Appendix A – MPOC and VTC governance processes

Appendix B – Summary of PEA's advice

Appendix C – Submission template

Other SCOP papers will be issued at key points, depending on how the First Gas design work progresses.

1.1 Terminology

The existing access codes – the Maui Pipeline Operating Code (MPOC) and the Vector Transmission Code (VTC) – use the term Transmission Service Provider (TSP) in relation to the commercial arrangements for use of the transmission system. This paper adopts the same term, and generally uses terms defined in those codes and in common use in the industry. A glossary of terms is provided at the end of the paper.

2. Proposed regulatory objective

This chapter sets out the Gas Act and Government Policy Statement (GPS) objectives, and highlights those that relate directly to gas transmission. It also develops a regulatory objective specific to the development of a new transmission access regime.

The Gas Act, GPS and regulatory objective are important, because they provide the framework against which Gas Industry Co will assess the new single access regime.

2.1 Gas Act and GPS objectives

When considering the need for regulation, the Gas Act and GPS objectives are the primary reference points.

The principal Gas Act s43ZN objective is:

...ensure that gas is delivered to existing and new customers in a safe, efficient, and reliable manner.

The other Gas Act objectives are:

1. the facilitation and promotion of the ongoing supply of gas to meet New Zealand's energy needs, by providing access to essential infrastructure and competitive market arrangements; and
2. barriers to competition in the gas industry are minimised;
3. incentives for investment in gas processing facilities, transmission, and distribution are maintained or enhanced;
4. delivered gas costs and prices are subject to sustained downward pressure;
5. risks relating to security of supply, including transport arrangements, are properly and efficiently managed by all parties; and
6. consistency with the Government's gas safety regime is maintained.

In addition, the Government adds the following objectives in the GPS:

1. Energy and other resources used to deliver gas to consumers are used efficiently;
2. Competition is facilitated in upstream and downstream gas markets by minimising barriers to access to essential infrastructure to the long-term benefit of end users;
3. The full costs of producing and transporting gas are signalled to consumers;
4. The quality of gas services where those services include a trade-off between quality and price, as far as possible, reflect customers' preferences; and
5. The gas sector contributes to achieving the Government's climate change objectives as set out in the New Zealand Energy Strategy, or any other document the Minister of Energy may specify from time to time, by minimising gas losses and promoting demand-side management and energy efficiency.

In relation to transmission pipelines, the GPS also expects Gas Industry Co. to pursue the following outcomes:

1. Gas industry participants and new entrants are able to access transmission pipelines, and related services, on reasonable terms and conditions; and
2. Gas governance arrangements are supported by appropriate compliance and dispute resolution processes.

2.2 Transmission access regime is important to achieving Gas Act and GPS objectives

Transmission access arrangements are central to achieving the Gas Act and GPS objectives. In particular:

1. Access arrangements can affect efficiency across the industry, from infrastructure utilisation through to decisions by gas users.
2. The transmission system provides the physical underpinning to enable competition in the wholesale gas market. Access arrangements can therefore have a major impact on the quality of competition in the upstream (production) and downstream (retail) sectors.
3. Access arrangements have an important influence on incentives to invest in the upstream, mid-stream, and downstream sectors.

For these reasons, Gas Industry Co has a keen interest in the design of transmission access arrangements.

2.3 Regulatory objective

Without diminishing the relevance of any of the Gas Act and GPS objectives, stakeholders generally find it helpful to have a 'regulatory objective' that provides a synthesis of the essential outcomes sought from any proposed reform. In respect of replacing the existing access regimes with a single new regime, we propose the following regulatory objective.

To promptly establish a new non-discriminatory gas transmission open access regime to replace the MPOC and VTC that facilitates:

1. efficient operation of the transmission system and use of pipeline capacity;
2. competition in upstream and downstream markets; and
3. efficient investment in pipelines.

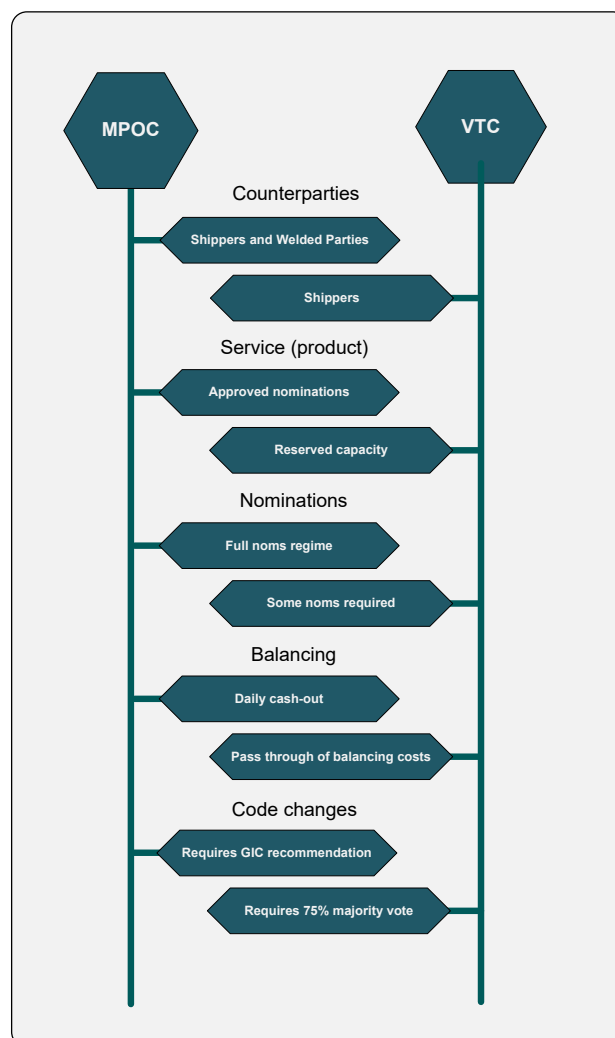
Q1: Do you agree with the proposed regulatory objective? If not, how would you propose describing the objective?

3. The existing codes

A new access regime will need to address all the matters dealt with by the current regime. Not all of these would necessarily be contained in the single new code – some may be dealt with in operating procedures, other contracts, or regulations. At this early stage in the process, Gas Industry Co is open-minded on which matters need to be covered in a single new code, and which could be dealt with elsewhere.

However, as a starting point it is helpful to consider what is contained in the current codes.

The VTC and MPOC were developed through different processes, at different times, under different ownership. And the access arrangements are different. Some elements of the regimes are unpacked in the following illustration, and discussed in more detail below.



3.1 Origins of the VTC

Open access arrangements on the Vector pipelines were developed in the mid-1990s; a time of widespread economic reform when utility businesses were being 'unbundled'³, and price control was being replaced by 'light-handed' regulation. The Vector open access regime was established at that time through a process of commercial negotiation between Vector and its then existing customers⁴. The resulting regime was put into effect through bi-lateral contracts between Vector and each of its customers, subsequently known as Shippers.

In 2007, the common terms of the bi-lateral Transmission Services Agreements for use of the Vector pipelines were codified into the Vector Transmission Code (VTC).

3.2 Origins of the MPOC

The Maui pipeline open access regime was developed in the mid-2000s through a Government facilitated process. Prior to this, the pipeline had been exclusively dedicated to the Maui Gas Contract holders Vector, Contact Energy and Methanex. The facilitated process involved intensive engagement at various levels between Government officials, the owners (Shell, Todd and OMV), the legacy Maui Gas contract holders, and senior managers from stakeholder businesses.

The result was that the common terms of both the bi-lateral Transmission Services Agreements, and Interconnection Agreements were codified into the Maui Pipeline Operating Code (MPOC).

3.3 Contract structure

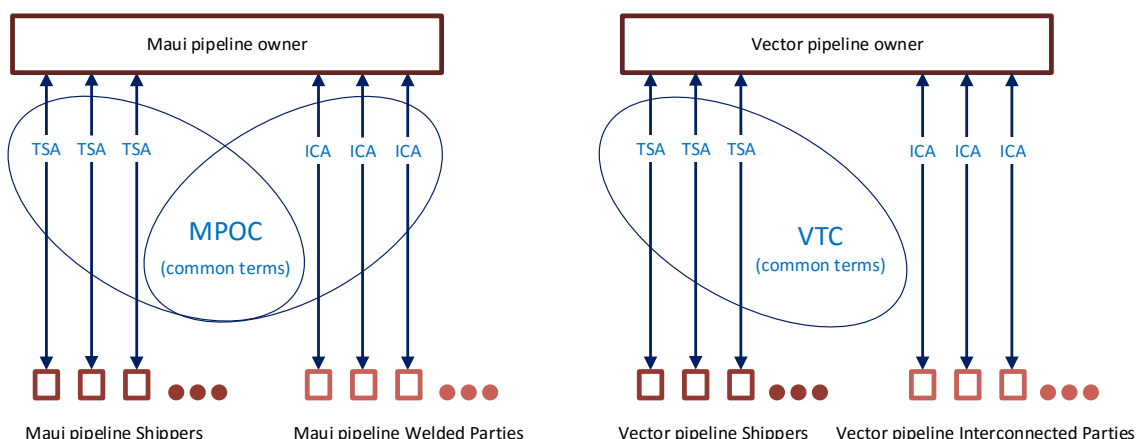
Aside from the Vector and Maui pipeline access regimes being different (as discussed below), there are also some differences in the contract structure. In particular:

1. The MPOC contains the common terms for both TSAs and interconnection contracts (ICA's). An ICA is a contract between the pipeline owner and an interconnected party, known in the MPOC as a Welded Party.
2. The VTC only contains the common terms for TSAs. Vector does have ICAs, but these are negotiated bi-laterally, subject to Vector's interconnection policy.
3. The governance arrangements for the MPOC and VTC are different. The main difference is that Vector and a majority of its Shippers can vote a VTC change into place without need for Gas Industry Co to support the change whereas MPOC changes must obtain Gas Industry Co's support.

³ 'Unbundling' means separating the natural monopoly parts of a business (typically the 'line services') from the potentially competitive parts (generally the retail/trading activities).

⁴ At the time, transmission customers comprised ten gas utility companies each of which had a statutory right to sell gas within a defined geographical franchise area, and NGC's own retail arm (selling gas in areas outside those area franchises). Those utility companies subsequently all unbundled their businesses to a greater or lesser extent, either through structural separation of the 'line' and 'energy' businesses, or through the operational separation of those businesses.

The contract structure is illustrated below.



3.4 Overview of MPOC access regime

The MPOC open access regime is based on Shippers making daily nominations at Welded Points (generally receipt points and delivery points). Every day, for each Welded Point, the associated Welded Party will aggregate the Shipper nominations and seek the approval of the pipeline operator to flow that quantity of gas. Once agreed, this quantity is known as the Scheduled Quantity.

Any difference between the quantity of gas that actually flows through a Welded Point on a day and the Scheduled Quantity is known as the Operational Imbalance. The pipeline owner takes responsibility for managing any Operational Imbalances over a permitted tolerance by 'cashing-out' the Welded Party (i.e. by buying or selling the imbalance).

This arrangement is often referred to as a 'flow on nominations' regime because, for all commercial transactions, a Shipper is deemed to have received/delivered the quantities of gas it has nominated, with any differences between physical flows and aggregate nominations being managed by the pipeline operator.

3.5 Operational provisions of MPOC

3.5.1 MPOC key concepts

Central to the access regime described by the MPOC is the management of nominations and gas flows at each Welded Point. A Physical Welded Point is where the pipeline connects with the infrastructure of an interconnected party, known as a Physical Welded Party. A Notional Welded Point is where gas is received from and delivered to a gas trading location, known as a Notional Welded Party.

A party transporting gas through the Maui pipeline is known as a Shipper and is party to a TSA with the TSP incorporating the terms of the MPOC. Each day a Shipper will submit nominations via OATIS for each Receipt Welded Point and Delivery Welded Point it wishes to use.

A Welded Party is party to an Interconnection Agreement (ICA) with the TSP, which also incorporates the terms of the MPOC. For each day, and for every Welded Point, the relevant Welded Party will agree a Scheduled Quantity with the TSP. The Scheduled Quantity will be the sum of Shipper nominations at that point. Once the Scheduled Quantity at a Welded Point is agreed with the TSP, the Welded Party will confirm all Shipper nominations at that point.

Operational Balancing Agreement (OBA) principles apply at all Welded Points. These principles are that:

1. each Shipper is deemed to receive or deliver quantities of gas on a day equal to the amount of its approved nominations;

2. the difference between the amount of gas that flows through a Welded Point on a day (sometimes referred to as the daily metered quantity) and the Scheduled Quantity is known as the Operational Imbalance and is allocated to the Welded Party; and
3. the Welded Party aims to minimise any Running Operational Imbalance. However, since the introduction of Market Based Balancing (MBB), on 1 October 2015, the daily Operational Imbalance at each Welded Point is automatically cashed-out to the level of a tolerance set out in MPOC Schedule 7, so Running Operational Imbalances will not exceed tolerances.

3.5.2 MPOC contracting eligibility criteria

To be eligible to enter into a TSA, MPOC s2.5(a) requires that a person demonstrate to the TSP's reasonable satisfaction that it can meet the requirements of the MPOC.

3.5.3 MPOC transmission service

Essentially, the TSP contracts to act as a Reasonable and Prudent Operator, to receive and deliver each Shipper's approved nominations, and manage pipeline pressures. (MPOC s2)

3.5.4 MPOC receipt and delivery quantities

Each Welded Party's receipts and/or deliveries are as measured by the metering system located at the Welded Point. Each Shipper's receipts and/or deliveries are deemed to be its Approved Nominations.

3.5.5 MPOC balancing

Managing the inventory of gas in the pipeline – the Line Pack – is a key component of managing pipeline pressures. The access rules encourage pipeline users to self-balance, but beyond specified tolerances Operational Imbalances at Welded Points are automatically Cashed-Out by the TSP. In addition to buying and selling gas via Cash-Outs, the TSP may also buy and sell additional gas to manage Line Pack. These additional gas trades are known as Balancing Actions. MPOC s3.3 provides that the TSP can undertake Balancing Actions using:

1. a Trading Platform;
2. a Balancing Platform; or
3. a bi-lateral contract.

In essence, a Trading Platform can be used where it offers Shippers an anonymous, non-discriminatory service, on publicly available standard terms and conditions that are acceptable to the TSP. Currently the TSP sources all its balancing gas from the emsTradePoint market – owned by TransPower NZ Limited.

Prior to using the emsTradePoint market, MDL sourced its balancing gas from the Balancing Gas Exchange (BGX). The BGX is a Balancing Platform, ie an electronic trading platform where the TSP is counterparty to all trades.

No bi-lateral contracts for balancing gas are currently in place.

The amount by which a Welded Party's daily imbalance exceeds the Welded Point tolerance is automatically cashed-out by the TSP at the end of each day⁵. This will involve the TSP buying gas from, or selling gas to, the Welded Party.

3.5.6 MPOC nominations regime

Each Shipper nominates the quantities of gas it wishes Welded Parties to inject/withdraw and the TSP to receive and deliver. Shipper intentions are signalled by posting information into OATIS at various times:

⁵ Noting that the tolerance may be affected by a ROIL multiplier (ie an added buffer before a cash-out) which the TSP may set during events such as contingencies and maintenance (MPOC s12.18I).

Monthly Rolling Forecast

No later than six business days before the end of the month a Shipper must provide the TSP with an updated quantity forecast for each Welded Point for each day of the following twelve months.

Provisional Cycle

By 2 pm on the last business day of each week, each Shipper must provide the TSP with its nominated quantities for each Welded Point for each day of the following week. MDL will match the aggregate of all Shippers' nominations at each Welded Point with the amounts notified by the Welded Parties. If the Welded Party and Shipper amounts do not match for a Welded Point, then the TSP and the Welded Party will seek to reconcile the difference. If they cannot, then the scheduled quantity is set at the lower of the two, and Shipper nominations will be scaled back proportionately.

Changed Provisional Cycle

This provides the opportunity for a Shipper to change its provisional nomination for the next day.

Again the aggregate of nominations is checked with Welded Parties and the revised approved nomination is posted on OATIS. Shippers have until 4 pm on the day prior to flow to submit their changed nominations to MDL.

Intra-Day Cycles (ID Cycles)

There are currently 4 intra-day cycles each transmission day. At each cycle a Shipper may revise its nominations for the day, as long as the revised level is above the level of energy deemed to have already flowed at the commencement of the intra-day cycle. The revised nomination must be confirmed by the Welded Party and MDL. If approval for the revised nomination is not given by both MDL and the Welded Party the request for intra-day nomination will have no effect.

From time to time the TSP has consulted on changes to the cycle times. The last change to cycle times took effect from 1 September 2015, when times became:

Cycle	Nominations Due	Cycle start time
ID1	2200 (day prior)	2300 (day prior)
ID2	1000	1100
ID3	1400	1500
ID4	1800	1900

3.5.7 MPOC Incentives Pool

The MPOC Incentives Pool is a liquidated damages mechanism. If a Welded Party injects/withdraws gas outside the daily tolerance, or exceeds a Peaking Limit, it must pay an Incentives Fee into the Incentives Pool. If another Welded Party suffers a loss or incurs a cost as a result, it may make a claim on the Incentives Pool (indeed, this is the only remedy available to it).

However, since 1 October 2015 when MBB commenced, daily cash-outs began, so imbalances over tolerance should not occur. So the only payments into the pool are in relation to peaking.

This Incentives Pool is managed by an Incentives Pool Trustee who is currently the TSP.

The last Incentives Pool profit and loss statement to be published on OATIS is for the 2013 calendar year shows Incentives Pool Charges of \$91,477.77, and Incentives Pool Claims of \$172,299.73.

3.6 Overview of VTC access regime

The essence of the VTC access regime is the sale of annual blocks of capacity to its Shippers. Shippers generally buy blocks of capacity in July each year, for the following 1 October to 30 September year (the 'gas year'). Each block of capacity is defined by a Receipt Point, a Delivery Point and a Maximum Daily Quantity (MDQ). A Shipper who buys a block of capacity has an entitlement is to receive and deliver gas up to the amount of MDQ on each day of the gas year.

This arrangement is often referred to as an 'annual capacity reservation' regime. However, a number of non-standard agreements for shipping gas on the ex-Vector pipelines also exist. From Vector's Contract Disclosures for 2014-15 Disclosure Year⁶, there are:

- 11 Supplementary Agreements;
- 6 Interruptible User Contracts; and
- 4 Interruptible Shipper Contracts.

3.7 Operational provisions of the VTC

3.7.1 VTC key concepts

Like the MPOC, the VTC comprises the common terms of each Shipper's TSA. However, unlike the MPOC, the VTC does not relate to Welded Parties. While the owners of facilities that are physically interconnected to the Vector pipeline will have contracts with the TSP, those contracts do not incorporate the terms of the VTC.

Central to the access regime described by the VTC is the reservation of annual blocks of capacity between Receipt Points and Delivery Points.

Once a year, from mid-August and the end of September, a Capacity Reservation process is run to determine Shipper reservations for the 1 October to 30 September year ahead. The process involves Shippers submitting good faith estimates, the TSP confirming provisional reservations, Shippers notifying their final reservations, and the TSP confirming those reservations.

Existing Shippers have first call on pipeline capacity for the year ahead. Prior to the VTC, some key access concepts were set out in an 'Information Memorandum'. One of those concepts was that 'Existing Customers have the right of first refusal to their existing level of Reserved Capacity in the next Contract Year. Otherwise, all new requests for Capacity are processed on a first come, first served basis.' While the VTC codified the right of existing Shippers to reserve capacity up to the level of their current reservations, it is otherwise silent on how capacity will be allocated if more is requested than is physically available.

The standard VTC TSA provides the Shipper with what is referred to in the US as 'no-notice service', where the Shipper can receive and deliver any quantity of gas, up to the level of its Reserved Capacity, without providing daily nominations.

In addition to the annual capacity reservation arrangements provided by a standard TSA, the VTC provides for Supplementary Agreements. A Supplementary Agreement supplements or amends the standard TSA as permitted by VTC s2.7(e), and outlined in s3.1 above. This permits

⁶ [Vector's Contract Disclosures for 2014-15 Disclosure Year - https://vector.co.nz/documents/101943/465118/160112+New+Prescribed+Contract+Disclosure_2014-15_Final.pdf/8b02557c-90b1-4738-af56-ab4350e4c7bb](https://vector.co.nz/documents/101943/465118/160112+New+Prescribed+Contract+Disclosure_2014-15_Final.pdf/8b02557c-90b1-4738-af56-ab4350e4c7bb)

a range of non-standard arrangements such as interruptible arrangements, or long-term arrangements.

Where more gas is transported for a Shipper than its Reserved Capacity, the Shipper is said to be 'in overrun'. Overruns can be Authorised or Unauthorised. In constrained situations the Unauthorised Overrun of one Shipper may interrupt or reduce service to another Shipper, resulting in a claim against the TSP. The VTC provides that Shippers will indemnify the TSP against any claims resulting from that Shipper's use of Unauthorised Overrun.

3.7.2 VTC contracting eligibility criteria

To be eligible to enter into a TSA, VTC s14.2 requires that a Shipper must hold an acceptable credit rating and pay two separate cash bonds; one to cover transmission invoices and another to cover Balancing and Peaking Pool (BPP) invoices. Alternatively, providing the Shipper maintains an adequate credit rating, a third party may provide security on its behalf.

3.7.3 VTC transmission service

Essentially, the TSP contracts to act as a Reasonable and Prudent Operator, and to receive and deliver quantities of gas up to the level of each Shipper's Maximum Daily Quantity (MDQ, being the aggregate of the relevant Reserved Capacity plus any relevant Authorised Overrun Quantity), and Maximum Hourly Quantity (MHQ, unless otherwise agreed, 1/16th of the MDQ).

3.7.4 VTC receipt and delivery quantities

Shipper receipts are determined by the Gas Transfer Agent (currently the TSP) applying the algorithms specified in Gas Transfer Agreements complying with VTC Schedule 6.

Shipper deliveries will generally be determined by the metering equipment at the Delivery Point where there is only one Shipper delivering to that Delivery Point, or otherwise by the Downstream Reconciliation Rules. Special arrangements apply at Frankley Road, Kapuni and Pokuru 2, as described in VTC s6.5.

3.7.5 VTC balancing

VTC Shippers are required to use all reasonable endeavours to match receipts and deliveries on a Pipeline. Basically, a Pipeline is a discrete sub-system connected to a single Maui Pipeline Welded Point. The current Pipelines are:

1. North – being the transmission lines north of Rotowaro, and south of Rotowaro as far as Hamilton, as well as the line from Te Kowhai to Morrinsville etc;
2. Bay of Plenty – being the transmission lines east of Pokuru;
3. South, Kapuni and Frankley Road (SKF) – being the transmission lines from Frankley Road to Kapuni; Kapuni to Pokuru, and all lines south of Kapuni; and
4. Te Awamutu North (TAN) – being the transmission lines downstream of Pirongia.

The TSP will use its best endeavours to maintain Line Pack in these pipelines within acceptable operational limits. It may tender for balancing gas if time permits (VTC s8.4), although this has never occurred to date. In practice, the Vector Pipelines are demand driven and, for the most part, Line Pack is managed by running the compressors between the Maui and Vector pipelines to maintain adequate pressures.

Where there has been a cash-out at a Welded Point between the Maui pipeline and a Vector Pipeline, the gas that is bought or sold is allocated amongst Shippers on the Vector Pipeline, broadly in proportion to their running mismatch positions (ie the difference between their running deliveries and running receipts).

3.7.6 VTC nominations regime

As mentioned earlier, the main transmission service on Vector Pipeline is a 'no-notice' service. However, VTC s5.1 allows the TSP, acting reasonably and on 3 month written notice, to require

nominations. However, such nominations are for 'informational purposes only' without any price consequences.

In contrast, non-standard Agreements generally do require nominations, and in some cases those nominations have price consequences.

3.8 Comparison of MPOC and VTC code provisions

The table below compares sections of the MPOC and VTC, identifying which are:

1. 'boilerplate' provisions;
2. Substantially similar in coverage;
3. Somewhat similar in coverage; and
4. Unique to each code.

Table 2 Comparison of MPOC & VTC sections

MPOC	VTC
Boilerplate sections	
1. DEFINITIONS AND INTERPRETATION	1. DEFINITIONS AND CONSTRUCTION
20. PRUDENTIAL REQUIREMENTS	14. PRUDENTIAL REQUIREMENTS
21. INVOICING AND PAYMENT	16. INVOICING AND PAYMENT
22. TERMINATION	20. TERMINATION OR SUSPENSION
27. FORCE MAJEURE	22. FORCE MAJEURE
28. LIABILITIES AND INDEMNITIES	23. LIABILITIES
32. ENTIRE AGREEMENT	28. ENTIRE AGREEMENT
33. SEVERABILITY	31. SEVERABILITY AND SURVIVAL
37. SURVIVAL OF PROVISIONS	
34. GOVERNING LAW	33. GOVERNING LAW
35. EXCLUSION OF IMPLIED TERMS	29. EXCLUSION OF IMPLIED TERMS
36. ASSIGNMENT	24. ASSIGNMENT
38. PRIVACY OF CONTRACT	30. CONTRACT PRIVACY
39. CONSUMER GUARANTEES ACT EXCLUSION	32. CONSUMER GUARANTEES ACT

Sections with substantially similar coverage	
2. PIPELINE SERVICES	2. TRANSMISSION SERVICES
Describes services provided and principal rights and obligations of parties.	
4. THE TSP IX. SCHEDULE 5 - THE TSP IX – IT REQUIREMENTS	SCHEDULE THREE: TERMS AND CONDITIONS OF ACCESS TO AND USE OF OATIS SCHEDULE FOUR: INFORMATION ON OATIS SCHEDULE FIVE: INFORMATION TO BE AVAILABLE VIA OATIS
Describes information available on OATIS and conditions of access and use of IT.	
6. DELIVERY OF GAS: TITLE AND RISK	7. TITLE AND RISK
Covers co-mingling of gas, title, possession, risk and deemed delivery.	
15. INTERRUPTIONS	10. INTERRUPTION OF TRANSMISSION
Covers rights to interrupt, reasons for interruption, Operational Flow Orders. MPOC also covers provision of contingency Line Pack.	
17. GAS SPECIFICATION	12. GAS SPECIFICATION
Covers responsibility for compliance with gas specification, obligations when non-specification gas is detected and indemnities for non-specification incidents.	
23. DISPUTE RESOLUTION	17. DISPUTE RESOLUTION 18. ARBITRATION SCHEDULE TWO: DISPUTE RESOLUTION PROCEDURE
MPOC provides for certain disputes to be referred to an expert and for the parties to agree a process for resolving other disputes, or for resolution through the courts. VTC also provides for expert disputes, and for the parties to agree a process, but otherwise arbitration will be invoked. See Appendix A for more detail.	
29. MODIFICATIONS TO THIS OPERATING CODE	25. AMENDMENT / NOTIFICATIONS
MPOC requires that changes obtain the support of Gas Industry Co and the TSP. VTC requires changes to obtain 75% Shipper support. See Appendix A for more detail.	
SCHEDULE 2 - SHIPPER AGREEMENT FORM	SCHEDULE ONE: TRANSMISSION SERVICES AGREEMENT
Pro-forma contracts to deal with matters unique to each Shipper (that incorporates by reference all the terms of the MPOC).	
Sections with somewhat similar coverage	
5. TECHNICAL STANDARDS FOR STATIONS AND WELDED POINTS 16. MEASUREMENT AND TESTING SCHEDULE 1 - TECHNICAL REQUIREMENTS FOR WELDED POINTS AND STATIONS	11. TECHNICAL STANDARDS / MEASUREMENT AND TESTING

MPOC describes engineering standards for stations, and rights to disconnect and monitor. Both the MPOC and VTC address meter ownership, testing and corrections.	
7. AUTHORISED QUANTITIES	4. CAPACITY RESERVATION
MPOC offers Authorised Quantities: giving a priority position in the nominations queue. VTC offers annual blocks of capacity.	
8. NOMINATIONS AND RENOMINATIONS	5. NOMINATED QUANTITIES 9 DISPLACED GAS NOMINATIONS
MPOC mandates daily nomination cycles. VTC generally only requires nominations under interruptible contracts, but has the right to call for nominations for larger delivery points if required. Also VTC requires Vector approval if Displaced Gas Nominations are to be made on the Maui pipeline.	
3. BALANCING ACTIONS 11. SHIPPER MISMATCH 12. OPERATIONAL IMBALANCES	8. BALANCING AND PEAKING
MPOC sets out an OBA primary allocation arrangement coupled to a Market Based Balancing regime. VTC covers the operation of a Balancing and Peaking Pool to allocate balancing costs among its Shippers.	
10. ALLOCATIONS	6. DETERMINATION OF GAS QUANTITIES SCHEDULE SIX: REQUIREMENTS OF GAS TRANSFER AGREEMENTS SCHEDULE SEVEN: FORM OF GAS TRANSFER AGREEMENT
MPOC refers to OBA principles and Gas Transfer Code. VTC refers to Gas Transfer Agreements and Reconciliation Rules.	
19. FEES AND CHARGES	15. FEES AND CHARGES
MPOC fees mostly variable Throughput Charges. VTC fees mostly Capacity Reservation Fees.	
24. CONFIDENTIALITY SCHEDULE 4 – CONFIDENTIALITY PROTOCOLS	19. CONFIDENTIALITY
MPOC provides for non-discrimination, ring-fences gas trading activity, provides for more extensive ring-fencing if the TSP becomes a gas producer, and allows for an annual review by an external auditor. VTC sets out how confidential information will be protected and how breaches of confidentiality can be claimed and processed.	
Sections unique to MPOC	
9. SCHEDULED QUANTITIES	
Sets out how Welded Party proposes and TSP confirms Scheduled Quantities at Welded Points.	
14. INCENTIVES POOL	
Arrangements for funding, claiming and paying liquidated damages.	
18. MAINTENANCE OF PIPELINE	
Describes how the pipeline will be operated, maintained and repaired with minimal disruption to users.	

26. ACCESS RIGHTS	
Addresses rights of Welded Parties and TSP to access stations, witness meter testing, inspect equipment, isolate gas flow etc.	
SCHEDULE 3 - WELDED PARTY AGREEMENT FORM	
Pro-forma contract to deal with matters unique to each Welded Party (that incorporates by reference all the terms of the MPOC).	
SCHEDULE 6 - MAUI PIPELINE PRESSURE LIMITS	
Sets out the maximum operating pressures applicable to different segments of the pipeline.	
SCHEDULE 7 - MINIMUM TOLERANCES	
Sets out peaking and Daily Operational Imbalance tolerances.	
SCHEDULE 8 - WELDED POINTS	
Lists details of Welded Points, including identifying the meter owner.	
SCHEDULE 9 - TP WELDED PARTY SHIPPER PRINCIPLES	
Principles such as daily balancing and conformity with the Gas Transfer Code, that apply to contracts a Shipper has with an interconnected pipeline.	
SCHEDULE 10 - TARIFF PRINCIPLES	
Describes how asset costs will be recovered through Tariff 1 and operating costs through Tariff 2.	
Sections unique to VTC	
	13 ODORISATION
	Describes how gas is odorised at certain receipt points (gas in the Maui pipelines is not odorised).

4. Initial scope of options

In the previous chapter we showed that each existing code covers a broad range of matters, and that there are also some differences between the codes in the services they offer and their coverage. There are also elements that lie outside the codes which nonetheless contribute to their efficient operation, such as the critical contingency and reconciliation arrangements. In this chapter we consider whether it is necessary at this stage to define what elements should be in a new code. We also consider what the scope of the options should be.

4.1 What elements of the access regime should be in the new code?

Ultimately, Gas Industry Co is concerned about the efficiency of the gas industry, of which the gas transmission access regime is a critical element. However we are open-minded on which matters should be addressed in a new code or in other instruments.

In aggregate, we expect that a similar range of matters will need to be covered in the new **access regime** as exists in the current regime. However, some matters will be addressed in the new **code** while others may need to be dealt with in subsidiary/associated instruments, such as operating procedures or regulations.

Q2: Do you agree that it is not necessary to specify what elements of the access regime will be addressed in a new code at this stage of the process?

4.2 What should the initial scope of the options be?

Although Gas Industry Co is concerned about the overall efficiency of the access regime, and open minded about which instruments are used to address its various components, there are some elements that will be core to the regime and warrant primary attention. These are the service definitions, ie what are the core services the TSP will offer to pipeline users. These are also the central arrangements of concern to current and prospective pipeline users.

Gas Industry Co therefore considers that, as a minimum, the first options to consider are for the transmission service definitions. At the highest level this involves deciding if the core service will be. Alternatives include:

1. A point to point service;
2. A zonal service;
3. An entry–exit service; or
4. A common carriage service.

Within each service it will be necessary to describe:

1. The products being offered (eg annual capacity, interruptible capacity, postage stamp transport etc);
2. How each product would be priced (eg by cost allocation or on a market); and
3. How each product would be allocated if scarce (eg on a first-come-first-served basis, in proportion to historic use, by auction etc).

We consider that the industry has already done a lot of work in this area, including the work of the Panel of Expert Advisers (PEA). In particular, in Chapter 3 of the PEA's July 2012 first advice paper, the PEA discussed overseas arrangements and the lessons we could learn from those other jurisdictions.

Once the core services are defined, it will be possible to consider the supporting arrangements, such as:

1. balancing arrangements (eg MBB, B2B etc);
2. reconciliation arrangements (eg D+1, monthly allocation etc); and
3. governance arrangements (eg code change and dispute resolution).

4.3 Continued relevance of PEA work

In this chapter we review the advice given to Gas Industry Co by the PEA and consider whether the outcomes it advocated are still relevant. A full summary of the PEA's advice was set out in Appendix A of Gas Industry Co's July 2013 document, Gas Transmission Investment Programme, Status and Development. That appendix is reproduced as Appendix B of this document.

4.3.1 Summary of PEA's desired outcomes

In Chapter 4 of its July 2013 second advice paper, the PEA set out the characteristics that a sound pipeline capacity access and pricing regime would possess. These were:

1. Pipeline owners should offer a menu of capacity rights (i.e. non-firm and firm, with firm rights offered over a range of durations). This would allow shippers to seek the rights that best match their needs. Furthermore, given that many shippers need to use both the Maui and Vector pipeline systems, the menus of rights should be harmonised across both pipeline systems.

2. When capacity is scarce, it should be allocated based on willingness to pay. This offers the greatest assurance that capacity rights will be held and used by the parties who can derive the most value from them. This process will also generate price signals, which can inform investment and operating decisions by pipeline owners, shippers, producers and gas users.
3. Pipeline information should be made available on a transparent and user friendly basis. This facilitates the proper pricing of capacity, promotes market confidence, and reduces the scope for concerns to arise about preferential information access (for example to gas shippers affiliated with pipeline owners).
4. There should be efficient arrangements for evolving and enforcing the rules relating to pipeline capacity access and pricing. This will help to ensure that the rules reflect the prevailing needs of the industry, and that rule change and enforcement processes do not discriminate in favour of, or against, the interests of any particular participants.

In Chapter 6 of the same paper, the PEA set out a set of 'guiding principles for moving forward'. These were proposed in the context of an Evolutionary Convergence approach. In summary, the guiding principles were:

Offer mix of transmission services across both pipeline systems

Firm and non-firm transmission services should be available to shippers on both gas pipeline systems, with rights to the firm service being offered for a range of contract durations, and allocated based on willingness to pay. Once ex ante rights are allocated, they should be tradable among parties.

Determination of physical transmission capacity

Pipeline owners should be responsible for determining the total physical capacity that is available to be offered to each location or zone, for a given security standard. The resulting capacity limits at different locations should be published by the respective pipeline owners. To assist in building confidence about future physical capacity determinations (especially as ex ante contractual rights could be offered for a number of years ahead), the pipeline owners should publish the methodology they use to determine physical capacity, including their relevant security standards. These methodologies should be stable over time.

Proportion of physical capacity available as firm service and contract durations

The proportion of physical capacity to be made available on firm contracts should be determined by a governance process that reflects the wider interests of shippers, users and pipeline owners.

A relatively simple term structure and release profile for capacity contracts should be adopted at the outset, and these should be evolved over time via a process that reflects the wider interests of pipeline users.

Nominations regime to allow for scaling when capacity scarcity arises

There is a strong case for moving to a regime where nominations apply for both firm and non-firm services to facilitate efficient scaling when congestion arises. This means nominations would apply at least for those zones on the pipelines where congestion could potentially arise during the term of the offered capacity contracts. Furthermore, parties should have an incentive to ensure that such nominations reflect the best possible information. One means of achieving this would be for nominations to form the basis for transmission charges.

Transition away from grandfathering and supplementary agreements

Current arrangements that give incumbent shippers a preferential renewal right to firm capacity (VTC reserved capacity rights based on a contract's previous capacity reservations) or preferential rights to physical capacity if curtailment arises (MPOC category B nomination provisions) should be phased out.

Consideration should also be given to existing so-called “supplementary agreements” that provide firm capacity rights to specific parties for a defined period. Pipeline owners should plan to phase these out in order to convert them over time to new generic capacity products subject to code changes. These arrangements should not preclude transparent and efficient discounting or capital expenditure recovery.

‘Bolt on’ arrangements for capacity pricing when scarcity occurs

Where capacity scarcity may arise, the primary allocation of contracts should be based on willingness to pay. This will allow a forward price curve to be discovered for capacity rights. A relatively simple auction process should satisfy these requirements, and should be applied (at least) to those pipeline zones or routes where congestion could plausibly arise during the term of the offered contracts.

Consideration should also be given to introducing a mechanism to generate price signals for allocating scarce pipeline capacity during actual physical curtailment situations. At the outset, it is probably sufficient that rights to firm service be tradable within a zone without requiring pipeline owner consent, with prices for such trades being published. More sophisticated approaches could be introduced over time, in response to market need.

Treatment of congestion rents

Congestion rents would have different characteristics depending on the process of discovering them. They may be volatile and difficult to predict in advance. In any event it would be problematic for pipeline owners to be allocated these rents, given the revenue cap regime that applies to transmission pipelines under Part IV of the Commerce Act.

Instead, any congestion rents should be distributed in a way that minimises distortions to long term bidding for firmness and short term incentives in relation to shipping.

Transparency of information

The guiding principle should be that all pipeline information relevant to the formation of prices for capacity rights should be made widely available. Information transparency is expected to provide benefits across many parties including gas users, shippers, producers, SOs and pipeline owners. For these reasons, the cost recovery mechanism for information provision should be fairly broadly based, such as inclusion within allowable transmission operating costs to be recovered under Part IV of the Commerce Act, or collection via a flat charge or levy.

Information providers

Information on each pipeline is currently provided by the relevant pipeline owner, either directly or via an agent appointed to undertake that task. A further possible evolution would be for the information provision function to be externalised from the two pipeline systems. This is not regarded as a priority issue, but may be attractive as part of the evolutionary path.

Governance for pipeline capacity access and pricing

Given the objective of evolving toward a harmonised set of capacity access and pricing arrangements across both pipelines, there is a good case for also evolving toward common governance arrangements for these issues. There are a number of different approaches for achieving this, and these we discuss above.

Dispute resolution provisions

As with code development processes, there is a high degree of commonality in the dispute resolution provisions contained in the MPOC and VTC, and there may be benefits in further convergence.

4.3.2 Summary of stakeholder responses to PEA's desired outcomes

Most submissions supported the PEA's view of the characteristics that a sound pipeline capacity access and pricing regime should have. However, MDL noted that the characteristics were not definitive, and that any regulation would need to be under the terms of the Gas Act 1992, particularly the section 43ZN objectives.

Stakeholder views on the PEA's suggested guiding principles were more extensive. MDL argued that MPOC and VTC arrangements needed to be compatible but not identical. MGUG noted that the guiding principles were secondary to the Gas Act objectives and characteristics of a well-functioning market. MRP thought the PEA had not recognised the security of supply benefits brought by the VTC's capacity grandfathering arrangements, and Vector considered Chapter 6 of the PEA's paper to be too discursive without expressing the principles concisely enough.

4.3.3 Synthesis of the PEA's guiding principles

We suggest that the characteristics and guiding principles proposed by the PEA are still valid, and consistent with the Gas Act and GPS objectives/outcomes. We consider that they can be adjusted to recognise the First Gas commitment to a single access regime, and expressed more concisely. This may be a helpful design guide. We propose the following synthesis:

A new transmission access regime should ideally:

1. Provide for a menu of transmission services, both firm and non-firm rights, where firm rights are;
 - (a) tradeable; and
 - (b) allocated on a willingness to pay basis when scarce.
2. Provide full disclosure of:
 - (a) the standard terms and conditions of the firm and non-firm services;
 - (b) the amount of firm and non-firm service offered;
 - (c) the physical capacity of the system (by location or zone, as appropriate) including the underlying methodology applied, which should be stable over time;
 - (d) the proportion of available capacity offered as firm service (the proportion to be determined by the TSP after stakeholder consultation);
 - (e) any programme for the progressive release of capacity (it is desirable for firm service rights to be offered for a range of terms, and generally with a rolling release in future years, but a relatively simple term structure and release profile could be adopted at the outset allowing the arrangements to evolve over time in response to the needs of contracting parties.);
 - (f) the basis on which non-standard arrangements may be negotiated;
 - (g) any non-standard agreements that are negotiated; and
 - (h) all information relevant to the formation of prices for capacity rights.
3. Include a nominations regime (at least for those zones where congestion is possible) with incentives for parties to give accurate nominations.
4. Move away from grandfathering arrangements that give preferential renewal rights to incumbent users.
5. Provide price signals to indicate scarcity where possible.
6. Allocate any congestion rents in a way that minimises distortions to long-term bidding for firm capacity and short-term incentives.

7. Recover the costs of making information transparent, and establishing a single access regime, from a broad base.
8. Be supported by efficient governance arrangements.

Q3: Do you agree with the suggested synthesis of the PEA's guiding principles?

4.4 Conclusions on initial scope of options

As discussed above, we consider that the core element of any access regime is the definition of the services being offered. At the highest level the decision involves a choice between alternatives such as:

1. A point to point service;
2. A zonal service;
3. An entry–exit service; or
4. A common carriage service.

Within each service we would expect an option to describe:

1. The products being offered (eg annual capacity, interruptible capacity, postage stamp transport etc);
2. How each product would be priced (eg by cost allocation or on a market); and
3. How each product would be allocated if scarce (eg on a first-come-first-served basis, in proportion to historic use, by auction etc).

Q4: Do you agree with the suggested initial scope of the options?

5. Process for developing new transmission access arrangements

This Chapter describes how Gas Industry Co will work with stakeholders to promote the Gas Act and GPS objectives in the development of new transmission access arrangements and ensure that it is in a position to recommend regulation to the Minister, should that be necessary.

5.1 First Gas and Gas Industry Co co-leadership roles

First Gas and Gas Industry Co have discussed what kind of process is suitable for developing the new code, and what roles each organisation should have in the process. The conclusion was that:

1. The process for developing new gas transmission access arrangements will be:
 - (a) Open: we will share information with stakeholders where practical
 - (b) Fair: we will provide equal treatment to all system users
 - (c) Collaborative: we will encourage and value participation
 - (d) Timely: we will aim for a 1 October 2018 “go-live”.
2. First Gas and Gas Industry Co will have complementary responsibilities for:
 - (a) Initial description and analysis of design options (First Gas)
 - (b) Identification and assessment of IT options (First Gas)
 - (c) Procurement and deployment of IT (First Gas)
 - (d) Drafting legal documents (First Gas)
 - (e) Training (First Gas)
 - (f) Testing proposals against Gas Act and GPS objectives (Gas Industry Co)
 - (g) Ensuring that all reasonably practicable options have been considered (Gas Industry Co)
 - (h) Drafting and recommending regulations regarding access and use, if required (Gas Industry Co).

5.2 Gas Industry Co’s regulatory role

If regulation is necessary, Gas Industry Co needs to ensure that it has met the following requirements of the Gas Act:

1. it has sought to identify all reasonably practicable options for achieving the objective of regulation;
2. it has considered:
 - (a) the benefits and costs of each option;
 - (b) the extent to which the objective of the regulation would be promoted or achieved by each option;
 - (c) other relevant matters.

3. it has ensured that the objective of the regulation is unlikely to be satisfactorily achieved by reasonably practicable means other than regulation;
4. it has identified its proposal, and has:
 - (a) provided a detailed statement of the proposal;
 - (b) stated the reasons for the proposal;
 - (c) assessed the proposal against the other reasonably practicable options;
 - (d) identified any other information relevant to the proposal.
5. it has consulted with persons that are representative of the interests of persons likely to be substantially affected by the proposed regulations;
6. it has provided the opportunity to make submissions on the proposal;
7. it has considered submissions on the proposal.

In practice, this means that Gas Industry Co needs to:

1. Maintain its independence during the code development process.
2. Within the constraints of item 1, to work with industry participants to achieve the regulatory objective.
3. Be prepared to recommend regulation where the objectives of the Gas Act and GPS are not being met.
4. For each option identified by First Gas and any other reasonably practicable option that Gas Industry Co has identified to meet the regulatory objective:
 - (a) consider the benefits and costs of each option;
 - (b) the extent to which the objective of the regulation would be promoted or achieved by each option;
 - (c) any other relevant matters in relation to each option.
5. Where Gas Industry Co makes a proposal for meeting the regulatory objective:
 - (a) provide a detailed statement of Gas Industry Co's proposal, the reasons for that proposal and an assessment against other reasonably practicable options; and
 - (b) Produce a consultation paper that consults on the options (both options identified by First Gas and other options identified by Gas Industry Co) and Gas Industry Co's preferred option.

Where possible, Gas Industry Co will endeavour to avoid creating an additional burden on participants by seeking to align its process with First Gas. It is for this reason that Gas Industry Co favours joint workshops and the issue of a single set of documentation for the purpose of consultation where possible. However, Gas Industry Co also needs to ensure that it covers off its statutory obligations in the event that it needs to recommend gas governance regulations. This effectively means that Gas Industry Co will need to build on First Gas' analysis and engagement with stakeholders to ensure that it covers off its obligations under the Gas Act and is in a position to recommend regulation without a significant delay to the development of a new access regime.

As well as ensuring that a regulatory back-stop is available, we see Gas Industry Co's involvement in the code development process as providing industry with an independent assessment of First Gas' proposed new access regime.

Q5: Do you consider that the process outlined above is appropriate?

Glossary

access regime	The arrangements that allow users to inject and withdraw gas from the transmission system.
balancing	The arrangements for matching the quantities of gas being received onto and withdrawn from the transmission system. Typically these include requirement for pipeline users to match flows to nominations, and for the TSP to prudently manage the linepack to achieve nominated flows within system constraints.
BPP	'Balancing and Peaking Pool'. A mechanism in the Vector transmission regime to ring-fence and allocate balancing costs via a trust account.
code	The common terms of access, incorporated by reference into contracts between the TSP and pipeline users.
cash-out	A sale or purchase of gas by the TSP to resolve an outstanding imbalance position.
Gas Transfer Code	A code developed by industry working groups to standardise how quantities of gas traded, or otherwise transferred, between Parties on the transmission system are calculated and notified.
Incentives Pool	Defined in the MPOC as '...the pool of money held on trust and administered by the Incentives Pool Trustee, into which all Incentives Pool Debits are to be paid and out of which Incentives Pool Claims are to be paid.' The Incentives Pool is essentially a liquidated damages arrangement that permits a Welded Party, who suffers damage as a result of another Welded Party being out of balance, to claim liquidated damages.
MPOC	'Maui Pipeline Operating Code', setting out the common terms of access to the Maui transmission pipeline.
OATIS	'Open Access Transmission Information System' is the IT system used to manage third party access to the Maui pipeline and Vector pipelines.
Shipper	A pipeline user that has contracted with the TSP to transport gas on the TSP's pipeline.
TSP	'Transmission Service Provider' is the term used in the MPOC and VTC to refer to the party providing transmission services, First Gas Limited.
VTC	'Vector Transmission Code', setting out the common terms of access to the Vector transmission pipeline.

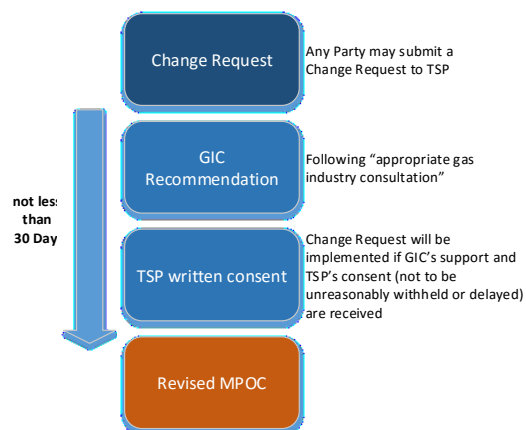
Appendix A MPOC and VTC governance processes

A.1 Code change processes

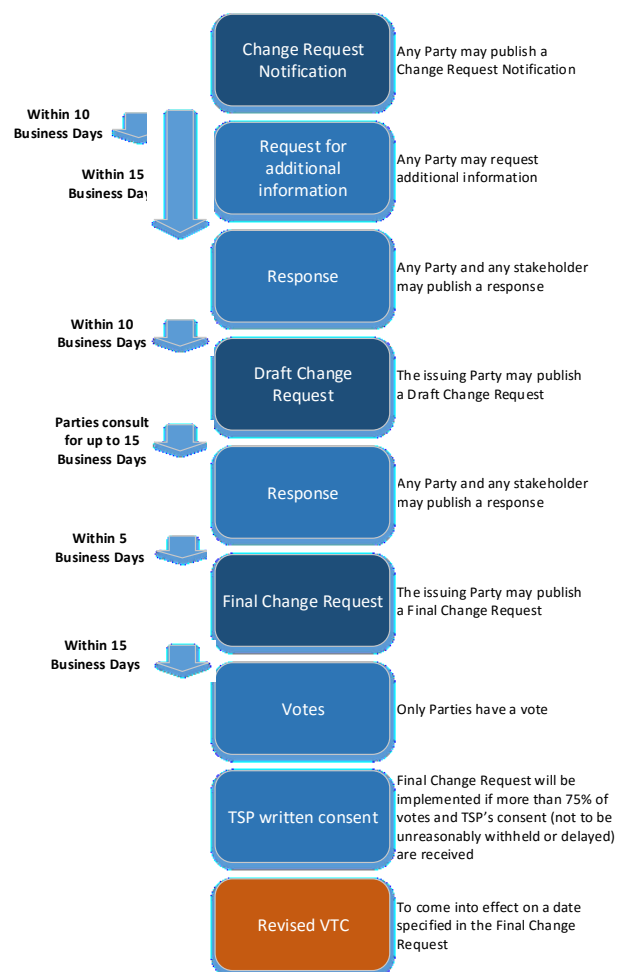
The processes for changing the MPOC and VTC are illustrated here, and described in more detail below.

Basic MPOC change process

(additional consultation steps are provided for in the MoU)



Basic VTC change process



MPOC change process

A change to the MPOC can be proposed by any party to the MPOC. Once a Change Request is received by MDL, the MPOC provides that Gas Industry Co (or an entity granted formal jurisdiction) is to make a recommendation to support (or not support) that Change Request following appropriate gas industry consultation.

A Change Request not supported by Gas Industry Co will lapse. Otherwise, where Gas Industry Co supports the Change Request, the TSP will give written consent (which may not be unreasonably withheld or delayed) to the Change Request and it will be implemented, but no sooner than 30 days after the date of the Change Request.

In addition, the MoU between the TSP and Gas Industry Co adds detail to the process. Before submitting the Change Request, the promoter is to discuss the proposal with the TSP in good faith, with a view to ideally finding a mutually satisfactory proposal. Regardless of the outcome, the proposer can then submit the Change Request to Gas Industry Co using a standard form to ensure that all the necessary information is provided.

Within 15 business days of receiving the Change Request, Gas Industry Co will advise the promoter if any other information is required and what consultation process and timetable will be followed. In practice this has tended to occur within a few days of receiving the Change Request.

Gas Industry Co will then post the Change Request and details of the consultation process on its website and call for submissions from stakeholders. In practice, around three weeks is allowed for submissions. Depending on the content of the submissions, cross-submissions may also be called for, although this has only happened very occasionally.

Once Gas Industry Co has analysed the Change Request and the submissions, it will publish a Draft Recommendation and again call for submissions from stakeholders. Between two and six weeks will be allowed, depending on the complexity of the issues. Cross submissions may again be necessary.

Once Gas Industry Co has all the information it needs to make a full analysis of the issues, it will develop a Final Recommendation, supporting or not supporting the Change Request.

VTC change process

A change can be proposed by any party to the VTC. The promoter of a change publishes a Change Request Notification summarising the change, why it is necessary and what its effect is likely to be.

Within 15 business days after publication of a proposed change, the TSP, Shippers and other stakeholders (including Gas Industry Co) may publish responses stating whether or not they support in principle the proposed change.

Within a further 10 business days, the promoter can then issue a Draft Change Request including a version of the VTC showing the proposed change.

For 15 business days after publishing the proposed wording, the TSP and Shippers consult on the variation. The TSP or a Shipper may publish a response to the Draft Change Request stating whether it supports the proposed change in principle, any specific objections to it and any conditions to its support. Gas Industry Co or any other stakeholder may also publish a response setting out its views on the proposed changes.

Within 5 business days after the consultation period, the issuer of the Draft Change Request may issue a Final Change Request including a summary of the proposed change, a response to any substantive specific objections raised on the Draft Change Request, and an amended version of the code showing the proposed change in track changes.

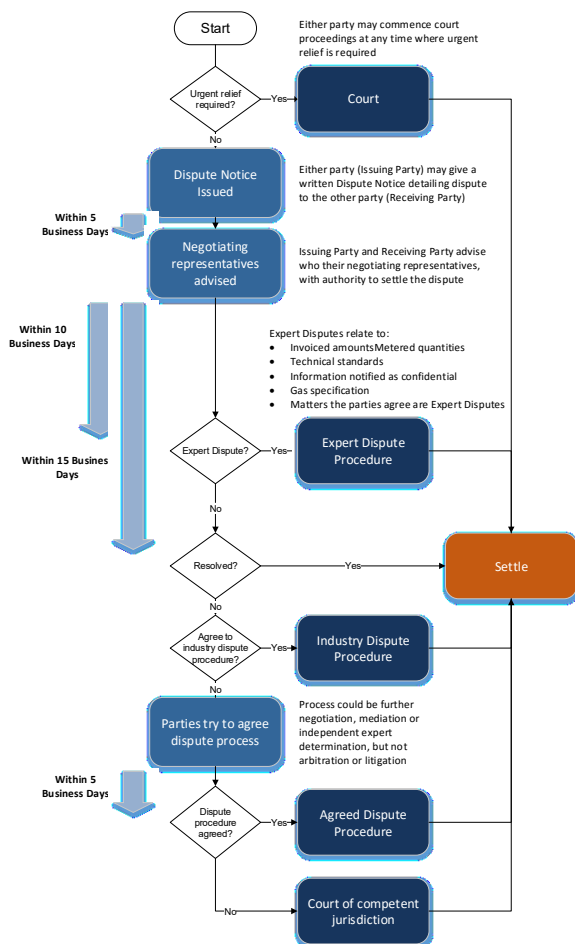
Within 15 business days after publication of the Final Change Request, the TSP and the Shippers may publish their position (and are deemed to consent if they don't do so).

The Final Change Request is passed if the TSP and 75% of Shippers agree it.

A.2 Dispute processes

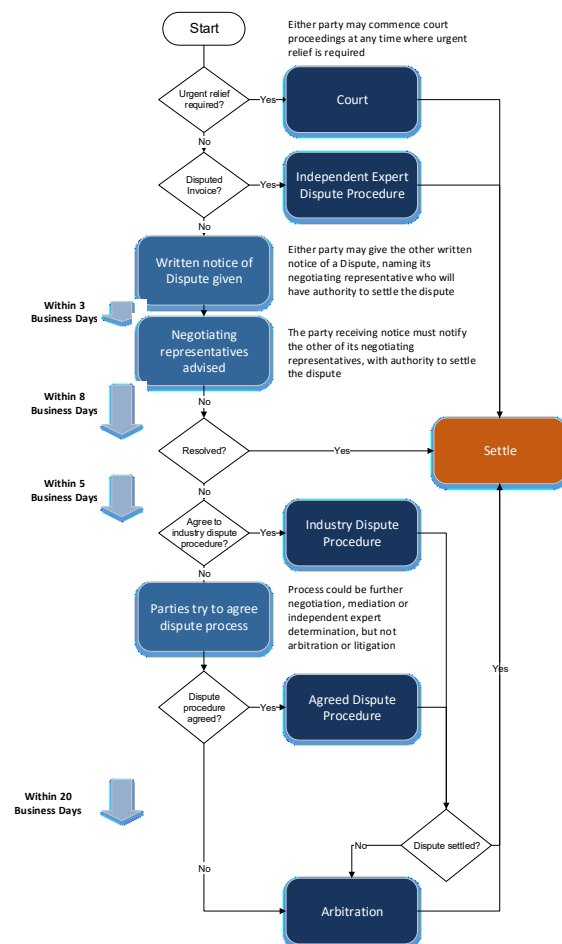
The processes for raising disputed under the MPOC and VTC are illustrated here and described in more detail below.

MPOC dispute resolution procedure



VTC dispute resolution procedure

Note, parties may agree in writing to extend any of the time limits



MPOC dispute process

Under the MPOC, disputes relating to invoices, metering, technical standards, Confidential Information, and gas specification are Expert Disputes. If not resolved between the parties within 10 Business Days, these disputes are referred to an Expert who may be selected by either the parties or, if they can't agree on one, the President of IPENZ.

Other disputes, that cannot be resolved by negotiation, are referred to a 'standard industry dispute resolution procedure', if the disputing parties have agreed to one. (Currently there is no such industry procedure.)

Or, the parties can agree their own process for resolving the dispute. For example, this might be further negotiation, mediation, or independent expert determination, but not arbitration or litigation.

If none of these options apply, then the dispute must be referred to a court of competent jurisdiction.

VTC dispute process

Under the VTC, disputes relating to invoices, if not resolved by negotiation within 15 Business Days of being notified, can be referred by either party to an independent expert for binding resolution. If the parties cannot agree on an expert, one will be nominated by the President of the New Zealand Institute of Chartered Accountants (NZICA).

As in the MPOC, other disputes, that cannot be resolved by negotiation, are referred to a 'standard industry dispute resolution procedure', if the disputing parties have agreed to one. (Currently there is no such industry procedure.)

Also as in the MPOC, where the parties haven't agreed to a standard industry dispute resolution procedure, they can agree their own process for resolving the dispute. For example, this might be further negotiation, mediation, or independent expert determination, but not arbitration of litigation.

If none of these options apply, then the parties will refer the dispute to arbitration, under the Arbitration Act 1996, except that sections 4 and 5 of the Second Schedule to the Act will not apply.

Appendix B Summary of PEA's advice

B.1 PEA's First Advice paper (July 2012)

In its first report - *Review of Transmission Access and Capacity Pricing, Advice from the Panel of Expert Advisers, July 2012* (PEA's First Advice) - the PEA examined current access arrangements for Vector's transmission system from the perspective of economic efficiency. It considered the main problems to be that:

1. grandfathering inhibits efficient allocation of capacity;
2. there is no price signal for scarce capacity;
3. there is low uptake of interruptible capacity arrangements;
4. the effectiveness of the secondary market is unclear: it is thinly traded and non-transparent;
5. there is a lack of transparency regarding the determination of the amount of commercial capacity; and
6. there is uncertainty about whether the regulatory incentives are adequate to encourage new pipeline capacity to be built when it is efficient to do so.

The PEA presented a straw-man proposal which it characterised as evolutionary rather than revolutionary, and therefore suitable for the small New Zealand market, and low cost. The straw-man proposal was to:

1. water down grandfathering rights when capacity is scarce by, say, grandfathering only 80% of capacity (s5.3 of PEA's First Advice);
2. auctioning any un-grandfathered capacity (s5.3 of PEA's First Advice);
3. make interruptible arrangements more transparent (s5.3 of PEA's First Advice);
4. reflect variable costs by variable charges - implying an increase in fixed charges and a reduction in variable charges (s5.4 of PEA's First Advice);
5. confirm bulletin board and tradability of power station capacity (s5.5 of PEA's First Advice); and
6. introduce a nominations regime (s5.6 of PEA's First Advice).

B.2 Submissions received on PEA's First Advice

A wide range of submissions were received, but some common themes emerged:

1. there were some concerns that a vision for the future had not been presented;
2. some were dissatisfied with the problem definition;
3. the straw-man was the only option given considerable attention. Submitters suggested that other options should have been considered, including a common carriage regime;
4. concerns that Vector's point-to-point contract carriage regime may not allow for full utilisation of physical pipeline capacity and that a shift to common carriage or the introduction of use-it-or-lose-it rules may need to be considered; and

5. support for greater transparency.

B.3 PEA deliberations since PEA's First Advice

Submissions on the PEA's First Advice caused the PEA to undertake a very thorough re-examination of its problem definition and prescription for improving access arrangements. A full description of this work can be found in the Gas Industry Co's March 2013 *Analysis of Submissions on Preliminary Advice from PEA to GIC*, and the minutes of the PEA meetings, which can all be found on Gas Industry Co's website. Below, we summarise the main results of the PEA's work.

B.3.1 Characteristics of a well-functioning gas transmission market

The PEA acknowledged the concern of a number of submitters that its strawman proposal was difficult to assess in the absence of a 'vision', and without alternative options. In the PEA's First Advice, the PEA recognised that more efficient outcomes may be achieved by establishing a common set of access arrangements that apply seamlessly across the Vector and Maui transmission pipelines. However, it did not go beyond this to set out a broader vision for the market. Rather it focused on the purpose of the Transmission Access and Capacity Pricing project as specified in the PEA Work Plan, ie '... to ensure Vector's arrangements for transmission access and capacity pricing allocate capacity efficiently and effectively signal the need for investment in additional capacity.' The narrow focus of this purpose reflected the industry concerns that gave rise to the GTIP. However, the PEA agreed with submitters that some more tangible description of 'what success looks like' would be useful. It approached this by first considering what would be the characteristics of an 'ideal' transmission market.

The PEA concluded that the overarching characteristic should be a goal of dynamic efficiency, which is to maximise efficiency in the present and in the future. Beneath this overarching goal, there are a number of secondary characteristics:

1. minimisation of costs (including transaction costs) of governing and operating efficient transport arrangements;
2. maximum efficient use of physical capacity, particularly at times of capacity scarcity;
3. competition in related markets not distorted;
4. efficient investment in related markets is facilitated;
5. investment in pipelines is facilitated;
6. independence of functions in governance and operation;
7. appropriate operational and commercial transparency; and
8. arrangements evolve in a timely fashion to meet changing needs.

B.3.2 Best access regime for the future

Having set out the characteristics of a well-functioning transmission market, the PEA next considered which particular style of access regime was best suited to the future New Zealand gas market. It concluded that there are too many uncertainties about the future gas market to reach a confident view. Rather, it considered that incremental changes would be preferred to radical changes given the high cost of significant regime changes.

B.3.3 Revised problem definition

Given submitters' views on the problem definition, the PEA carried out a gap analysis of current arrangements versus the ideal characteristics. This exercise led to a revised problem definition as follows:

Current access arrangements do not provide for:

1. efficient allocation of scarce capacity, both physical and commercial (ie as defined by contracts/codes);
2. price signals to facilitate efficient investment; or
3. transparency on physical state of the pipelines and contractual arrangements for the use of pipelines.

Also:

4. grandfathering of capacity may reduce competition to supply downstream users;
5. unnecessary costs may arise from different Maui and Vector access arrangements;
6. end users do not need to secure long term capacity rights on the Maui pipeline; and
7. vertical integration demands special care that arrangements cannot favour affiliate businesses.

B.3.4 Transmission Access and Capacity Pricing project: Revised purpose statement

With all of the re-framing discussed above, the PEA considered that it was necessary to re-examine the purpose statement for the transmission access and capacity pricing project. This was agreed as:

The purpose of the Transmission Access and Capacity Pricing project is to ensure that transmission pipeline access arrangements are dynamically efficient. In particular, the arrangements should:

1. *transparently provide for the efficient utilisation of physical transmission pipeline capacity;*
2. *enable and facilitate efficient investment;*
3. *be harmonised across both transmission systems, to the extent that it is efficient; and*
4. *offer transport services that, to the extent that is efficient, meets the needs of users.*

B.4 April 2013 Workshop

Gas Industry Co hosted a workshop in April 2013. The workshop was an opportunity for the PEA to update the industry on the work described above and its findings. Detailed presentations for the workshop are available on Gas Industry Co's [website](#).

The workshop included three sections. First, Gas Industry Co provided an introduction to the GTIP project including a recap on what was initially intended to be accomplished. We noted that the scene had changed since the initial concerns about the capacity shortage emerged, particularly that all requests for firm capacity were met in the current gas year. Second, Graham Scott and Lewis Evans (the PEA Chair and PEA's Economics Advisor respectively) provided their and the PEA's assessments of the current status of the Transmission Access and Capacity project. Third, was an opportunity for the industry to discuss the topics presented and options for improvement. In general, participants valued the GTIP work and supported it being carried through to completion. The review of options did not uncover any that had not already been discussed.

B.5 PEA's Second Advice paper (July 2013)

B.5.1 Guiding principles

In its second report - *Advice from Panel of Expert Advisers, Report to Gas Industry Company*, July 2013 (PEA's Second Advice) - the PEA proposes a set of 'guiding principles':

Offer mix of transmission services across both pipeline systems

TSOs should offer firm services for a range of terms and allocate these according to willingness to pay;

1. once allocated, firm service rights should be tradable;
2. TSOs should also offer non-firm services; and
3. services should be harmonised to facilitate shipping across both pipelines.

Determination of physical transmission capacity

1. TSOs should publish the physical capacity determinations of their systems (by location or zone, as appropriate) and the underlying methodology applied, including the security of supply standard; and
2. capacity determination methodologies should be stable over time.

Proportion of physical capacity available as firm

1. a process allowing input from Shippers, users and TSOs should be used to determine what proportion of physical capacity will be offered as firm.

Term structure and release profile for services

1. desirable for transport services to be offered for a range of terms;
2. a progressive release of capacity for a particular future year is preferred; and
3. arrangements should evolve over time in response to the needs of contracting parties.
4. Nominations regime to allow for scaling when capacity scarcity arises
5. nominations should apply for all contracts (at least where congestion is possible); and
6. there should be incentives for parties to give accurate nominations (such as nominations forming the basis of transmission charges).

Transition away from grandfathering and supplementary agreements

1. arrangements giving preferential renewal rights to incumbent users should be phased out;
2. arrangements should be generic and subject to codes; and
3. transparent discounting or capital recovery arrangements should not be precluded.

'Bolt on' arrangements for capacity pricing when scarcity occurs

1. at the time capacity rights are initially allocated: allocate capacity on a willingness to pay basis (at least where congestion is possible during the term of the offered contracts). A simple auction should be adequate; and
2. at the time of a constraint: consider how price signals might be generated. This could involve capacity trading, with more sophistication being introduced over time.

Treatment of congestion rents

1. any congestion rents should be allocated in a way that minimises distortions to long-term bidding for firm capacity and short-term incentives.

Transparency of information

1. all information relevant to the formation of prices for capacity rights should be made widely available;
2. the costs of making information transparent should be recovered from a broad base; and
3. the information provision functions could be externalised in the longer term.

4. Governance for pipeline capacity access and pricing
5. the establishment of common code development processes for capacity access and pricing issues should be a priority; and
6. the establishment of common code dispute resolution procedures should be considered.

B.5.2 Recommendations

The PEA recommends that Gas Industry Co:

- a. Adopts the guiding principles set out in Chapter 6 of the PEA's Second Advice paper and considers industry feedback where appropriate;
- b. Invites signatories to MPOC and VTC to adopt and operationalise the guiding principles by:
 - i. Developing an implementation plan that:
 - I. Includes milestones that take account of shorter and longer term needs;
 - II. Provides for identified changes to be made in a timely manner, subject to a public cost-benefit analysis justification;
 - ii. Establishing governance arrangements to support delivery of the plan;
 - iii. Reporting regularly to Gas Industry Co on progress against the plan;
 - iv. Consulting with wider industry as appropriate;
- c. Provides feedback to MPOC and VTC participants on the proposed implementation plan and milestones; and
- d. Considers regulatory options should they be required.

B.5.3 Indicators of success

The PEA suggests that progress should be assessed using the following 'indicators of success':

- a. A memorandum of understanding has been agreed between Maui and Vector to develop and implement governance change processes and provide for the development of an implementation plan
- b. Change requests to implement governance have been formulated and proposed by November 2013
- c. Governance arrangements are in place to facilitate implementation of operational changes in a timely way
- d. There is sufficient information transparency for industry and wider stakeholders to be confident that they can assess the likelihood of congestion on pipeline systems (Maui and Vector)
- e. There is confidence in the industry that any short-term excess demand for capacity can be managed in a way that ensures that scarce capacity is allocated to the highest value uses
- f. Planning for a mechanism to enable price signals for scarcity on a longer term timeframe is in place, and will be implemented in accordance with cost benefit criteria.
- g. Gas Industry Co is able to provide assurance to the government that any future shortage of capacity will be able to be handled in an efficient way.

Appendix C Submission template

Gas Transmission Access

Single Code Options Paper - Part 1

Submission prepared by: <company name and contact>

QUESTION		COMMENT
Q1:	Do you agree with the proposed regulatory objective? If not, how would you propose describing the objective?	
Q2:	Do you agree that it is not necessary to specify what elements of the access regime will be addressed in a new code at this stage of the process?	
Q3:	Do you agree with the suggested synthesis of the PEA's guiding principles?	
Q4:	Do you agree with the suggested initial scope of the options?	
Q5:	Do you consider that the process outlined above is appropriate?	

ABOUT GAS INDUSTRY CO.

Gas Industry Co is the gas industry body and co-regulator under the Gas Act. Its role is to:

- develop arrangements, including regulations where appropriate, which improve:
 - the operation of gas markets;
 - access to infrastructure; and
 - consumer outcomes;
- develop these arrangements with the principal objective to ensure that gas is delivered to existing and new customers in a safe, efficient, reliable, fair and environmentally sustainable manner; and
- oversee compliance with, and review such arrangements.

Gas Industry Co is required to have regard to the Government's policy objectives for the gas sector, and to report on the achievement of those objectives and on the state of the New Zealand gas industry.

Gas Industry Co's corporate strategy is to 'optimise the contribution of gas to New Zealand'.

SUBMISSIONS CLOSE:
by 5pm, Friday 7 October
2016

SUBMIT TO:
www.gasindustry.co.nz

ENQUIRIES:
Ian Wilson
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