Report on interconnections to Maui and Vector transmission pipelines

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GAS INDUSTRY COMPANY LIMITED

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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'.

Executive Summary

Transmission pipeline owners have been improving their arrangements for allowing users to interconnect facilities, such as treatment facilities, to the pipelines.

This Report:

- recaps on the development of transmission pipeline owners' interconnection arrangements (Chapter 2);
- reviews how well recent interconnections to the Vector and Maui pipelines worked under the new arrangements (Chapter 3);
- considers possible policy issues and/or opportunities for improvement (Chapter 4); and
- identifies the key findings, recommendations and next steps (Chapter 5).

Key findings are that:

(a) the owners of the Vector and Maui pipelines now each have very comprehensive interconnection policies , procedures and documentation;

(b) although there are some differences in their interconnection arrangements, both are closely aligned with the Transmission Pipeline Interconnection Guidelines (Interconnection Guidelines) published by Gas Industry Co in 2009;

(c) the recent interconnections have all been effective, with pipeline owners and interconnecting parties working collaboratively;

(d) of the few issues that have arisen, we believe some arose from misunderstandings that can be avoided in future; and

(e) confusion arises from the various roles performed by Vector. This was found to be an issue for both Tag Oil in relation to its Vector pipeline interconnections, and Todd Energy in relation to its Maui pipeline interconnection.

We recommend that pipeline owners should:

(a) regularly review their interconnection policy and template documents (ideally as part of a document management plan), including giving documents a date and a unique identification number, to minimise the potential for confusion;

(b) thoroughly brief parties seeking interconnection on their interconnection policy, the process that needs to be followed, and the related documentation. The interconnecting parties should be regularly reminded of the policy in the course of the interconnection;

(c) consider how best to address concerns that an interconnecting party may have that it is being treated unreasonably or that terms and conditions of interconnection are unreasonable; and

(d) consider what steps can be taken to clarify the various roles that Vector performs during the interconnection process, particularly any 'gatekeeper' functions such as approving designs, equipment specifications, or test results.

In essence, pipeline owners have developed effective interconnection policies, processes and documentation. A small number of issues arose during the recent interconnections. Gas Industry Co will discuss these directly with the pipeline owners, and will keep a watching brief on future interconnections.

Contents

1 Introduction

The Gas Act 1992 (Gas Act) and the April 2008 Government Policy Statement on Gas Governance (GPS) provide for the development of arrangements that allow for access to gas transmission pipelines on reasonable terms and conditions. While the Gas Act provides for regulations to be made for that purpose, we believe the best approach will be non-regulatory. Accordingly, Gas Industry Co has been working with pipeline owners to achieve voluntary improvements to interconnection arrangements.

Our views on interconnection best practice are set out in the Interconnection Guidelines (originally published in February 2009 and revised in November 2009). Transmission system owners have evolved their interconnection processes to align with those Interconnection Guidelines, and this Report reviews recent pipeline interconnections to see how well the new arrangements are working in practice.

2 Development of transmission pipeline interconnection arrangements in New Zealand

In this chapter we outline how transmission pipeline interconnection arrangements in New Zealand evolved.

2.1 Initial years of open access

Vector established open access arrangements to its transmission pipelines in the mid-1990's, and in 2005 the Maui pipeline also became an open access pipeline. Each pipeline established technical requirements for any new interconnection point, and procedures for allowing parties to interconnect. However, a range of issues arose while establishing new interconnections. Discussions between Gas Industry Co and the interconnecting parties suggested that the main concerns were that:

- interconnection processes were poorly defined;
- technical requirements for interconnection equipment occasionally changed during the course of a project;
- roles and responsibilities of pipeline owners, their agents, contractors and technical advisers were confusing; and
- liability/insurance matters were sometimes not addressed until late in the process.

2.2 Interconnection Guidelines

In 2009, Gas Industry Co developed the Interconnection Guidelines setting out our view of best practice. In particular, the Interconnection Guidelines:

- describe what a pipeline owner's interconnection policy should address;
- describe the phases of interconnection, what should happen in each phase, and the key decision points;
- establish principles that should apply to the overall provision of an interconnection service, and to each phase of interconnection;

- encourage pipeline owners to adopt consistent interconnection documentation, establish clear responsibilities; and minimise barriers to entry by promoting transparency and efficiency.

The pipeline owners responded by evolving their processes to better align with the Interconnection Guidelines.

2.3 Interconnection reviews

After we published the Interconnection Guidelines and allowed some time for pipeline owners to improve their interconnection arrangements, we reviewed their arrangements. The first review was in 2009, and found that each pipeline owner's interconnection documents were generally well aligned with the Interconnection Guidelines, but incomplete. The most significant omissions were:

- interconnection policies to provide an overall framework for the process and to improve transparency; and

- a means of resolving disputes with parties seeking interconnection that arise before contractual arrangements are entered into (pre-contractual disputes).

In response to our review, the pipeline owners continued to develop their interconnection arrangements.

A subsequent review was held in 2010 to formally assess each pipeline owner's interconnection arrangements against the objectives in the Gas Act and GPS. We found that in response to the previous review both pipeline owners had prepared draft interconnection policies which met most of our evaluation criteria (based on the Gas Act and GPS objectives).

With respect to pre-contractual disputes, both pipeline owners included dispute processes in their new policies. In particular:

- Maui Development Limited (MDL) extended its contract dispute resolution process to cover some pre-Interconnection Establishment Agreement (ICEA) disputes; and.

- Vector included a process for resolving pre-ICEA disputes into its draft interconnection policy (although it did not allow for the involvement of an independent reviewer).

While these were significant improvements, we believe that the ideal arrangements would allow for independent consideration of all issues in dispute. We advised MDL and Vector of the results of our analysis, and highlighted the areas where we believed there was scope for further improvement.

Our subsequent correspondence with the (then) Associate Minister of Energy and Resources on these matters led to the request for the review of the next two interconnections to each of the transmission pipelines.

2.4 Request for this Report

Having reviewed pipeline owner interconnection procedures against the Interconnection Guidelines in 2009, and the Gas Act and GPS objectives in 2010, we reported the outcomes to the (then) Associate Minister of Energy and Resources in a letter dated 20 December 2010. In response (9 March 2011), the Associate Minister requested Gas Industry Co to '…undertake a formal review of the current interconnection arrangements after the next two interconnections to each of the transmission pipelines, or by the end of 2013, whichever is sooner.' In effect, we were asked to assess how well the new arrangements work in practice.

2.5 Interconnections reviewed in this Report

On 20 December 2013 we wrote to the Minister of Energy and Resources advising that:

- there had been two recent interconnections to the Vector pipeline, and both had been reviewed by Gas Industry Co;
- there had been no substantial interconnections to the Maui pipeline, but two significant interconnections were expected to occur in the first half of 2014, and would be reviewed when complete; and
- two gas trading markets had been 'interconnected' with the pipelines and we would report on these separately.

The Vector pipeline interconnections are to connect processing facilities at the Sidewinder and Cardiff/Cheal fields to Vector's Frankley Road pipeline (known as the Norfolk and Cardiff interconnections). To date only one substantial[1] Maui pipeline interconnection has occurred; to allow gas to be received from and delivered into Todd Energy's McKee/Mangahewa pipeline (known as the Tikorangi#3 interconnection). We understand that another Maui pipeline interconnection is pending, but that its timing is uncertain. Rather than delay reporting to the Minister, this report considers the two Vector pipeline interconnections and the one Maui pipeline interconnection.

[1] In 2012 a temporary physical interconnection to the Maui pipeline was made to provide an alternative supply point to New Plymouth City to allow maintenance work on the permanent interconnection station owned by Vector. This temporary station only operated for 3 days and was then decommissioned. We understand the operation went smoothly but we have not formally reviewed it.

3 Review of recent interconnections

In this chapter we review the two recent interconnections to the Vector pipeline – the Norfolk interconnection to the Sidewinder field in 2010/11 and the Cardiff interconnection to the Cardiff/Cheal fields in 2012/13 – and one interconnection to the Maui pipeline – the Tikorangi#3 interconnection in 2013/14.

The Vector and MDL documentation in relation to interconnections are somewhat different. To some extent this reflects the differences in their operating codes: the Maui Pipeline Operating Code (MPOC) and Vector Transmission Code (VTC). The MPOC relates to both interconnected parties (Welded Parties) and to parties transporting gas on the pipeline (shippers), whereas the VTC only relates to shippers. However Vector and MDL's interconnection processes are very similar. We outline each pipeline owner's interconnection process below, before reviewing how the recent interconnections have worked out.

3.1 Vector pipeline

Vector's interconnection process

The main process milestones, in accordance with Vector's policy and documentation requirements, are:

- Application

  Vector's policy requires an application to be made in the correct form and for Vector to consider the suitability of the application within five Business Days of receipt. If the application is complete Vector will, within a further 25 business days, complete its assessment of the application. Vector will assess the application against the requirements contained in the application form and in Vector's interconnection policy. The assessment will focus particularly on location, type, design and operating pressures, risks, land/space availability, consent issues and available transmission capacity to support the proposed flow rates.

- Interconnection Establishment Agreement

  Vector's policy generally provides for practical design concepts to be identified, investigated and subsequently agreed by the parties under an Interconnection Establishment Agreement (ICEA). It also requires a Front-End Engineering and

Design (FEED) study of the agreed design concept to be undertaken by a suitably qualified person at the cost of the prospective interconnecting party. Additional to the design concept, the FEED study must also include a P90 estimate of the costs of constructing the interconnection point (including contingency sums) and a project timeline. Vector must also be provided with a copy of the FEED report. The ICEA is an interim arrangement which will expire if the project does not proceed (or proceed in time); it will also expire if the project does proceed once the parties sign the relevant Interconnection Agreement (ICA).

- ICA

  Vector's policy provides for detailed design, procurement and construction (and subsequent commissioning of the interconnection) to occur after the relevant ICA is signed by both parties. The ICA also ensures certainty around ownership of the interconnection (or equipment within the station); the period over which the Agreement will run; which party will undertake the design and construction; liability for consequential costs (especially how they will be recovered if they exceed FEED estimates); fees and charges (both one-off and ongoing); and confirmation of the technical information (including metering).

- Transmission

  Vector's policy generally provides that once an interconnection point has been constructed and commissioned, gas will be able to flow through the transmission system. However, gas cannot be transmitted without a valid transmission agreement.

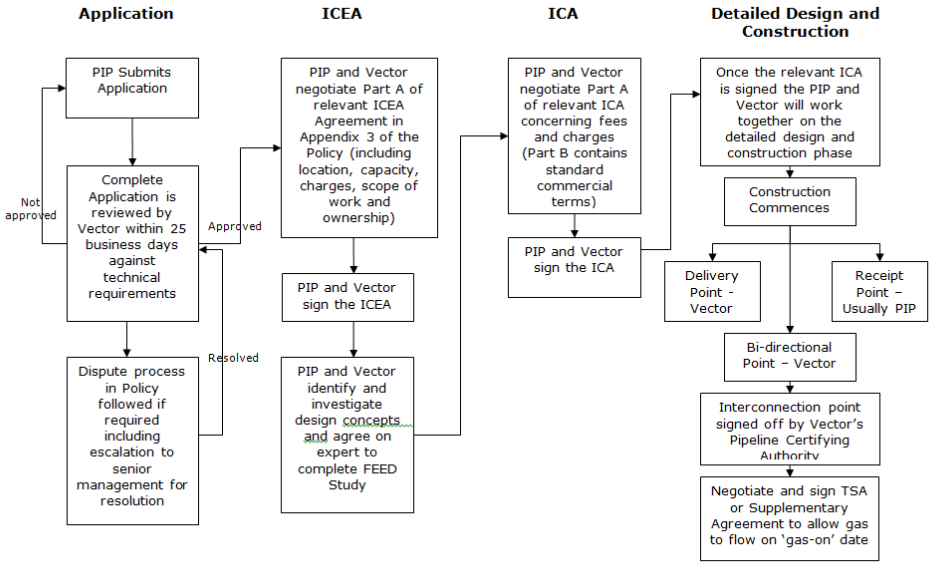

Figure 1 – Overview of Vector's interconnection process from Appendix 1 of its interconnection policy

Norfolk interconnection

The Norfolk interconnection of the Sidewinder production facilities to the Vector pipeline was completed on 22 September 2011. We commissioned Concept Consulting to review the interconnection.

The interconnection was relatively straightforward[2]: a receipt point interconnection to a pipeline with ample capacity, where much of the ownership and liabilities lay with the interconnecting party; Tag Oil Limited (Tag Oil). In addition, Tag Oil's consultant who dealt with technical/engineering matters for Tag Oil – Independent Technologies Limited (ITL) – also undertakes occasional work for Vector, so it has a detailed understanding of the Vector structure and personnel involved in the various engineering and operational disciplines.

Concept found that:

- The interconnection process closely followed the Vector interconnection policy with both parties agreeing it went relatively smoothly. The Vector turnaround times appeared reasonable with Vector generally meeting its interconnection policy objectives in spite of overlap with the Christmas and January holiday period.
- Tag Oil found the Vector process was easy to follow (it found the diagram in Appendix 1 of the Vector interconnection policy – reproduced here as Figure 1 – particularly helpful in understanding the process from a commercial perspective).
- For commercial matters the identification of persons responsible for negotiation was clear.
- For technical matters the approval responsibility was somewhat dispersed amongst the various disciplines within the Vector organisation. However, Vector was reported to have a pragmatic and helpful approach.
- Resolution of the FEED and incorporating the FEED details into the ICA is time-consuming. The initial FEED and revised FEED took around 10 weeks. Construction followed and commissioning was completed 10 weeks after the ICA was executed. ITL suggested that Vector could consider locking-in the first FEED and managing subsequent changes under a formal project change control process.
- Technical engineering requirements are not documented in sufficient detail to enable an engineer to design the interconnection without the involvement of Vector. However, interconnections are infrequent and each has different technical requirements that do not lend themselves to a more standardised and documented approach.

Cardiff interconnection

On 26 April 2013 we received a letter from Vector confirming that the Cardiff interconnection of the Cardiff/Cheal field production facilities to the Vector pipeline

[2] The Concept report notes that bi-directional or Delivery Point interconnections are likely to be more difficult because ongoing operation, maintenance, certification and liabilities are likely to be significantly more complex.

was complete. Vector noted that this was the second interconnection under its new interconnection policy and provided the 'vital statistics' for the project.

Like the Norfolk interconnection, the Cardiff interconnection was relatively straightforward. The party seeking interconnection was Cheal Petroleum Ltd, owned by Tag Oil, who was also the counterparty to the Norfolk interconnection. The interconnection was also similar in other respects. In particular:

- both interconnections were to a pipeline with ample capacity – the Frankley Road pipeline – so no capacity issues emerged;
- both interconnections were receipt point interconnections;
- Tag Oil owned both sets of interconnection facilities (other than the hot taps, isolation valves and associated pipework);
- ITL Ltd were consulting engineers on both projects; and
- both projects took about 40 weeks from receiving the interconnection application to flowing the first gas (see Figure 2).

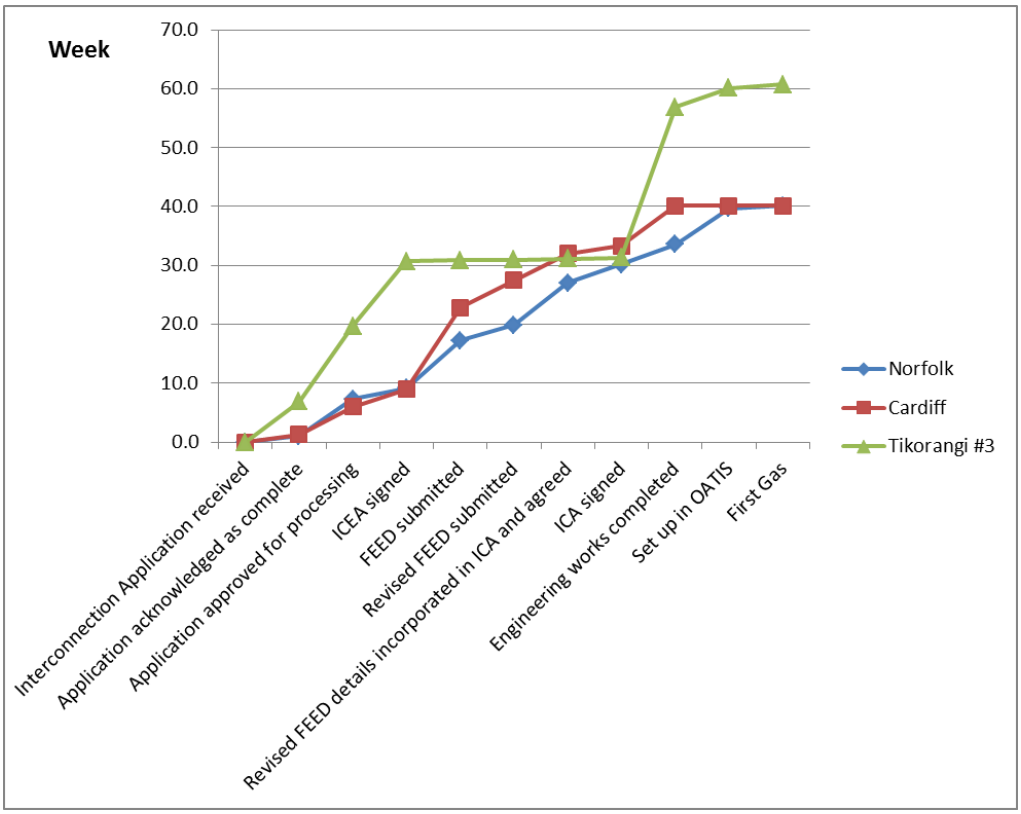

Figure 2 - progress of Norfolk and Cardiff interconnections

In our preliminary discussions, Tag Oil confirmed that the 'vital statistics' provided by Vector were correct, that there were no unusual features to the project, that Vector's

interconnection policy had been followed, and that Tag Oil was satisfied with the timing, communication and documentation. Given this, we considered that there would be no added benefit in Concept Consulting interviewing the parties.

On the basis of the information provided by Vector and agreed by Tag Oil, and our subsequent discussions with those parties we found that:

- The interconnection process followed Vector's interconnection policy with both parties agreeing that they dealt with each other in good faith and in a timely manner throughout the process, and that there were no disputes at the application stage or at any stage while operating under the ICEA or ICA.
- Tag Oil first approached Vector on 6 June 2012 to discuss the proposed interconnection and was supplied with the application form and interconnection policy. Tag Oil submitted the application on 20 June 2012. Vector requested some additional information and clarification and on 29 June 2012 Vector advised Tag Oil that its application was suitable for assessment.
- Vector completed its assessment on 1 August 2012 and advised Tag Oil that its interconnection application was approved. Vector also completed an ICEA and sent that to Tag Oil for consideration on the same day.
- After some modifications the ICEA was agreed on 22 August 2012.
- Tag Oil submitted its FEED study to Vector on 27 November 2012. Tag Oil agreed to reimburse Vector for its interconnection costs, and to construct and hand over the station assets that would then be owned by Vector. This was reflected in an ICA agreed on 26 February 2013.
- Construction of the hot-tap interconnection was commenced by Vector on 20 February 2013 and commissioning of Tag Oil's export gas pipeline and the metering occurred during March 2013. Vector then notified Tag Oil that all of the pre-conditions to gas flow set out in the ICA were satisfied and the Gas-on date would be 28 March 2013.
- The Cardiff Mixing Station was set-up in OATIS in March 2013, and Tag Oil entered into a gas sales agreement with a Vector shipper and gas began to flow through the station into the Frankley Road pipeline on 28 March 2013.

3.2 Maui pipeline

Maui's interconnection process

MDL's draft interconnection policy contains 28 process steps described in tabular format, each with a description, summary of relevant information, responsibility and timeframe. The main process milestones are:

- Application

  MDL's policy requires an application to be made in the correct form and that MDL will confirm whether the New Interconnection Application Form is materially complete, or whether additional information is required within 15 Business Days of receipt. If the application is complete MDL will, within a further 25 business days, complete its assessment of the application. MDL will assess the application against the requirements contained in the form and its policy. The assessment will focus particularly on ownership, design and construction of equipment.

- Interconnection Establishment Agreement

  MDL's believes that a large proportion of the steps, issues and information flows in the post-application phases fall within the ambit of the comprehensive ICEA, including key requirements, milestones, approvals, hold-points and timeframes. The interconnecting party provides the information for the ICEA (preliminary design overview, layout drawings etc.) and MDL confirm if the information is complete within 15 days of receipt. MDL will then conduct a technical review within a further 25 days.

  On approval of the Preliminary Design Documentation, the interconnecting party will need to submit more detailed information, construction procedures, risk management plans etc. MDL will confirm whether this additional information is materially complete within 15 days of receipt, and during the subsequent 25 business days it will conduct a technical review.

  Various follow-us steps are required before the ICEA can be completed, such as amending its Pipeline Authorisation, a letter of assurance from the interconnecting party that the MPOC conditions are met, confirmation of insurance cover etc.

- ICA

  When the conditions specified in the ICEA are satisfied (for example, that the parties have agreed to the ownership of, and liability for, any equipment connected to the Maui Pipeline), MDL will issue the interconnecting party with an ICA Approval Letter which may specify any outstanding matters (such as technical documentation), that need to be addressed before an ICA can be signed. When all pre-conditions are met, the ICA will be signed.

- Transmission

  The interconnecting party will liaise with MDL on when the MDL-owned primary isolation valve can be opened to enable gas flow into or out of the Maui Pipeline.

Tikorangi #3 interconnection

The Tikorangi #3 interconnection of Todd Energy's McKee/Mangahewa pipeline to the Maui pipeline was substantially complete[3] on 13 May 2014. This was the first significant interconnection under MDL's draft interconnection policy. We commissioned Concept Consulting to review the interconnection.

Some aspects of the interconnection were unusual. The interconnection is both a receipt point and a delivery point, so matters such as design, ownership and liability required significantly more negotiation than for a straightforward receipt point.

There were actually two Interconnection Applications. The first (14 March 2013) was replaced by a second (16 May 2013) with changed metering location and provision for the delivery of gas from the Maui pipeline as well as injection into it.

Concept found that:

- The interconnection process generally followed the MDL draft interconnection policy and timeline. An exception was the provision of ICEA documents that according to the policy should be provided one business day after MDL acceptance, but in fact took 11 and 23 business days (the original application elapsed) respectively between approvals and providing the documents.
- Todd and MDL agreed that, from a construction perspective, the Tikorangi #3 interconnection was successfully completed due to good co-operation exhibited by all the parties involved.[4]
- Some aspects of interconnection (agreement on ICEA insurance and ICA prudential requirements) were on the critical path of Todd Energy's McKee/Manghewa pipeline project, but did not delay the project.
- For commercial matters, the identification of persons responsible for negotiation was clear, but agreement proved difficult on a number of matters (discussed below).
- For technical matters, Todd Energy's perspective was that the approval responsibilities within Vector, in its role as MDL Technical Operator (TO), seemed to

[3] The handover document was signed and the primary isolation valve opened connecting the Todd and Maui pipelines allowing Todd to commence nominations and flow gas into the Maui Pipeline. MDL's ICA Approval Letter did list a few 'Outstanding Steps' to be satisfied post-gas flow and before a Final Approval Letter will be issued by MDL.
[4] In particular, Todd Energy noted that the Maui Pipeline operators provided staged approvals to enable physical progress and avoid disruption to other aspects of the project. And we understand that representatives of MDL's Commercial and Technical Operators often executed documents and witnessed activities outside of business hours, including being on call over weekends.

be dispersed among a number of personnel. Also, these personnel had not been involved at an early enough stage of the interconnection project.

- Some key Todd Energy personnel said that they were unaware that there was an MDL interconnection policy and/or the suite of interconnection documents on the OATIS website. They said that it would have been very helpful to have known about these.

Commercial issues

Contentious commercial issues can occasionally cast light on policy matters that warrant attention, so it is worth briefly considering the commercial issues that arose. However, these should be seen in the overall context of a successful and collaborative project where all parties worked co-operatively to get the job done, including sending/reviewing/executing documents, and witnessing activities outside of normal business hours.

Todd Energy acknowledges MDL's efforts to facilitate the project and avoid delays, but also identifies some aspects of the interconnection process that caused it frustration. In particular, it considers that:

- MDL sought to impose unreasonable terms in the ICEA;
- MDL sought to impose an unreasonable quantum of insurance cover;
- MDL should have considered competitive alternatives before nominating Vector Gas to perform the welding on the Maui Pipeline; and
- MDL imposed prudential requirements in the ICA that were not appropriate since Todd Energy was already a welded party under the provisions of the MPOC and was therefore already considered to be sufficiently creditworthy.

MDL does not agree, and believes that some of these matters are misunderstood. It notes that:

- the terms proposed by MDL were equitable and MDL acted reasonably;
- it advised Todd Energy at an early stage that it wished to discuss the insurance requirements;
- MDL does not 'nominate' or require Vector to perform all hot-tap related activities on the Maui Pipeline. An interconnecting party may contract-out hot-tap activities to a third-party service provider. However, Vector (in its capacity as MDL TO) will necessarily be involved in the hot-tap process by undertaking tasks such as:
    - assessing and confirming (or otherwise) the capability, experience and competence of the service provider(s) that the interconnecting party wishes to engage to perform the hot-tap activities;

- reviewing and approving all design and construction procedures and plans pertaining to the hot-tap activities; and

- in relation to prudential requirements, it is for the Welded Party to propose how it will satisfy MPOC prudential requirements. Todd Energy's first proposal did not strictly relate to Todd Energy Limited, who is the counterparty to the ICA, so was unacceptable to MDL, but MDL did not 'impose' prudential requirements.

4 Consideration of possible policy issues and/or opportunities for improvement

We have described how the transmission pipeline owners have improved their interconnection arrangements to get better alignment with the Interconnection Guidelines (and Gas Act objectives), and how those arrangements are now working effectively in practice. In this chapter we consider whether there are any outstanding public policy concerns, or any opportunities for further improvement.

Gas Industry Co expects that there will be commercial disagreements during the course of a complex project, and that not all of these will be resolved harmoniously. We have no role in considering the pros and cons of individual commercial positions. However, we do have a responsibility for considering whether the overall process meets Gas Act and GPS objectives. Our mandate under Part 4A of the Gas Act and the GPS includes a number of objectives relevant to arrangements between gas market providers and pipeline owners, including:

- 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 (s43ZN(b)(i));
- barriers to competition in the gas industry are minimised (s43ZN(b)(i));
- delivered gas costs and prices are subject to sustained downward pressure (s43ZN(b)(iv)); and
- 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 (GPS s12.2).

Pipeline owners are the only parties that can permit interconnection with the open access pipelines. In the context of the Gas Act objectives this puts a particular onus on them not to create undue barriers to entry or impose unreasonable costs on a party seeking interconnection.

It is inevitable that disputes will arise in the course of an interconnection. The pipeline owner has the upper hand in such disputes and this also places an onus on them to act reasonably and allow for their reasonableness to be tested through suitable dispute arrangements that the interconnecting parties are made aware of.

It can be anticipated that matters such as insurance and prudential requirements will be contentious. However, pipeline owners have responsibilities to existing system users, and need to ensure that interconnecting parties are of substance and have adequate insurance cover. Pipeline owners should front-foot these matters with the interconnecting party and be confident that any requirements they place on them are reasonable and that suitable means of compliance are indicated and discussed at an early stage of the interconnection process. It may be helpful for pipeline owners to work with Gas Industry Co to test whether there is scope for a standardised approach on these matters, founded on best practice.

It is also predictable that interconnecting parties may become confused by the different roles Vector performs[5], and the relationships it has with the different parties involved. We know that the pipeline owners are sensitive to this and try to ensure that there is no confusion in their own ranks and, as far as possible, no confusion in the mind of the interconnecting party. However, the evidence suggests that it is still not easy for representatives of the interconnecting party and the pipeline owners to keep track of which hat everyone is wearing. We acknowledge how difficult it is to address this issue, but urge Vector to consider whether there are steps it can take to address the problem. We believe it is particularly important that, for any 'gatekeeper' functions Vector performs (such as approving designs, equipment specifications, or test results), the affected party is clear about Vector's authority, responsibility and process.

[5] As well as being the owner and operator of its own pipelines, Vector is the Technical Operator and System Operator for the Maui pipeline, and can provide third-party services to MDL, and to the interconnecting party.

5 Key findings, recommendations and next steps

5.1 Key findings

Key findings are that:

(a) the owners of the Vector and Maui pipelines now each have very comprehensive interconnection policies, procedures and documentation;

(b) although there are some differences in their interconnection arrangements, both are closely aligned with the Interconnection Guidelines;

(c) the recent interconnections have all been effective, with pipeline owners and interconnecting parties working collaboratively;

(d) of the few issues that have arisen, we believe some arose from misunderstanings that can be avoided in future[6]; and

(e) confusion arises from the various roles performed by Vector. This was found to be an issue for both Tag Oil in relation to its Vector pipeline interconnections, and Todd Energy in relation to its Maui pipeline interconnection.

5.2 Recommendations

Gas Industry Co wishes to suggest a number of improvements to pipeline owners' documentation and/or processes. We will discuss these directly with them. Here we only note the more generic recommendations. We recommend that pipeline owners should:

(e) regularly review their interconnection policy and template documents (ideally as part of a document management plan), including giving documents a date and a unique identification number, to minimise the potential for confusion;

(f) thoroughly brief parties seeking interconnection on their interconnection policy, the process that needs to be followed, and the related documentation. The interconnecting parties should be regularly reminded of the policy in the course of the interconnection;

[6] In particular, MDL does not 'nominate' or require Vector to perform all hot-tap related activities on the Maui Pipeline, and it is the Welded Party who must propose how it will satisfy the MPOC prudential requirements.

(g) consider how best to address concerns that an interconnecting party may have that it is being treated unreasonably or that terms and conditions of interconnection are unreasonable; and

(h) consider what steps can be taken to clarify the various roles that Vector performs during the interconnection process, particularly any 'gatekeeper' functions such as approving designs, equipment specifications, or test results.

5.3 Next steps

It has been useful to review recent interconnections but we note that there have only been a few – two very similar interconnections to the Vector pipeline, and one interconnection to the Maui pipeline. A different set of issues may emerge with other interconnections (such as delivery point interconnections, or interconnections where pipeline capacity is constrained, or interconnections where different ownership arrangements are sought). We will therefore propose to the Minister that we maintain a 'watching brief' on future interconnections. In particular, we propose to:

- talk with future interconnecting parties to learn whether any difficulties were encountered; and
- assess whether there are any remaining policy issues arising from future interconnections that need to be addressed.

Gas Industry Co will also discuss with each pipeline owner specific suggestions for improvements to its documentation, and how they can best satisfy interconnecting parties that the interconnection terms and conditions of interconnection are reasonable.

Glossary

delivery point	An interconnection point to a TSO's pipeline where gas is delivered from the pipeline
GPS	Government Policy Statement on Gas Governance, issued under the Gas Act, published 18 April 2008.
ICA	Interconnection Agreement, an agreement between a pipeline owner and an interconnecting party that addresses the commercial arrangements and operational requirements of the interconnection station
ICEA	Interconnection Establishment Agreement, an agreement between a pipeline owner and an interconnecting party providing for the construction and commissioning of an interconnection station
interconnection	Establishing a physical connection between a TSO's transmission pipeline and the assets of another party
interconnection service	A TSO's offer of terms on which it provides interconnection to its pipelines
interconnection station	A station containing some or all of the necessary pressure control, filtration, metering and odorisation equipment
MPOC	Maui Pipeline Operating Code containing the multilateral terms of transportation and interconnection, which are referenced by relevant transmission service agreements (which are between a shipper and a TSO for the transport of gas) and ICAs
receipt point	An interconnection point to a TSO's pipeline where gas is injected into the pipeline
VTC	Vector Transmission Code, containing the multilateral terms of transportation which are referenced by relevant transmission service agreements (which are between a shipper and a TSO for the transport of gas)