19 January 2018

Submissions

Gas Industry Company Limited

By email: info@gasindustry.co.nz

Re: Evaluating the GTAC versus the existing codes

1 Overview

1.1 Todd Energy and Nova Energy have a major interest in effective gas transmission

Todd Corporation (**Todd**), through its subsidiaries Todd Energy (**TE**) and Nova Energy (**Nova**), is a producer, shipper and retailer of gas in New Zealand. TE through its interests in the Maui, Pohokura, McKee, Mangahewa and Kapuni gas fields is one of New Zealand's largest gas producers. Nova is a gas wholesaler and retailer and is a significant user of gas at electricity generation facilities at McKee, Whareroa, Kapuni and Edgecumbe. It also owns gas transmission assets and low pressure pipelines servicing mainly large commercial and industrial consumers.

As such, efficient functioning of the gas delivery system in New Zealand is very important to Todd. Todd has extensive experience working with both the 'Vector' and 'Maui' gas pipelines for more than 20 years. The gas transmission arrangements are a significant component of the gas delivery system, and as such Todd has, through Nova, fully participated in an engaged and constructive manner to ensure that the proposed changes to existing industry arrangements are both fit for purpose and represent an improvement on the status quo.

1.2 The Code

Todd has been supportive of developing the GTAC and believes that it has the potential to be a 'materially better' code than the existing Maui Pipeline Operating Code (**MPOC**) and Vector Transmission Code (**VTC**) (together, referred to in this letter as the **existing codes**). However, Todd believes that the GTAC in its current form requires further amendment to be 'materially better' than the existing codes.

Todd's primary concerns are:

a) Uncertainty as to access rights for ex-Maui pipeline connected parties. This includes interconnections points for Todd interests in the Pohokura, McKee, Mangahewa and Maui gas fields, which together represent circa 80% of all gas produced and sold in New Zealand.

b) Uncertainty as to the how the GTAC will be applied and whether or not pipeline users will actually benefit from the proposed changes.

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1.3 Gas consumers

A key consideration is whether the GTAC will result in a better customer experience. Todd concludes that it largely would, with the possible exception of those very large users required to operate under hourly profiles. In addition we make the following observations:

a) Under the GTAC the shipping costs for the vast majority of gas customers becomes simpler and more certain. Comparative pricing between retailers will be easier to compare than under the VTC.

b) Some users will be detrimentally affected due to the change in pricing methodology changing from a largely fixed capacity charge favouring flatter load consumers to a variable charge. Customers that have a more variable profile will benefit as a result of the change.

c) Some of the less predictable large gas users may be required to coordinate more closely with their supplier on changes to their expected daily demand in order to mitigate balancing charges and penalties arising under the nominations regime.

d) While gas transmission only forms a relatively small component of the delivered cost of gas to residential consumers, the fully variable nature of the DNC charge means that residential consumers gain through lower costs due to their peak winter consumption in comparison to the VTC capacity charges. This is a favourable outcome as it helps gas compete with electricity as an efficient source of winter heating and at no additional cost to the transmission and distribution networks.

2 Specific Issues

2.1 Access rights for ex-Maui pipeline connected parties

Currently connected parties to the Maui pipeline have the detail of interconnection rights specified in the MPOC. Those rights are subject to the MPOC code change process; are transparent and can be relied upon by parties to support the continuity of their businesses, daily operational requirements and longer term investment decisions. Those rights are therefore core to the connected parties' interests.

The GTAC in its current form is largely silent on interconnection terms and instead refers to a draft standard interconnection agreement that the parties are expected to negotiate in private at later date. For those parties, including TE/Nova, without certainty as to the form and detail of those interconnection agreements, replacing the MPOC with the GTAC is a backward step.

Given that the Maui interconnected parties in the aggregate represent circa 80% of gas produced (Maui, Pohokura, McKee, Mangahewa and Turangi) and at least 50% of all gas consumed (Methanex and Huntly), this issue must have a significant bearing on the assessment of the GTAC.

Assurances that interconnection terms should not be a matter of concern may be comforting but cannot be relied upon in assessing the code as drafted. This issue is further exacerbated by the knowledge that parties connected to the ex-Vector high pressure transmission pipeline (including several TE/Nova connections) will not have their existing interconnected rights similarly terminated and renegotiated; and furthermore those legacy arrangements will likely remain confidential and will not be subject to all of the terms, including transparency, that are set out in the GTAC.

While Todd believes that this is a material hurdle for the GTAC, we believe that it is one that can be overcome by the parties negotiating and agreeing interconnection terms in a timeframe that allows the GTAC to be implemented from 1 October 2018.

2.2 Uncertainty as to code application and impact

Todd's reservations stem primarily from those areas where there remains residual uncertainty with respect to content or how the GTAC will be implemented in practice. The GTAC requires more input from Shippers to manage gas balances overall on a daily basis and tighter control of the Shipper's overall position in order to minimise shipping costs. The question of overall benefit therefore depends on whether the benefit of this tightened control is returned to Shippers and Producers through:

a) the availability of Park & Loan capacity;

b) flexibility in injecting at different receipt points;

c) management of congestion;

d) adequate flexibility in hourly profiles; and

e) improved control of the Taranaki pipeline pressure.

Unfortunately, there still remains uncertainty in:

a) The implementation of the hourly profiles and how they work with the timing of the intra-day nominations cycles. This is particularly important for major irregular gas users, including gas fired electricity generators.

b) The application of the Priority Rights under congestion.

c) Whether Taranaki pipeline pressures will be at the extreme high or low end of the ranges less frequently.

d) The treatment of revenues from the park and loan service. If the revenues are to be treated as an unregulated revenue stream by First Gas, then this represent a transfer of wealth from pipeline users to First Gas. If instead the revenues are treated as regulated revenue streams and returned to users either directly or through cheaper pipeline tariffs then this would likely result in efficiency gains and an overall improvement.

3 Conclusion

The lack of certainty over the specific terms of Interconnection Agreements on the Maui pipeline represents a significant commercial risk in the context of the value and importance of assets connected. Sensitivity to this issue is heightened by the discriminatory treatment of Maui pipeline connected parties relative to those parties with connections to the Vector pipeline on confidential terms that will remain unchanged.

If the issues noted in our submission can be addressed then Todd believes that the GTAC will likely represent an improvement on the existing codes.

4 Detailed discussion of the GTAC

The following Appendix addresses aspects of the GTAC in detail for the purpose of informing the Gas Industry Company in its assessment of whether the GTAC is materially better than the existing codes.

Yours sincerely

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5 Appendix - Detailed discussion of the GTAC

Item	Description	Comment	Assessment
1	**Gas transmission products**		
GTAC s2	Transmission Services	This section makes First Gas' role clear and s2.7 provides specific assurance that First Gas cannot favour its non-regulated activities.	The GTAC is an improvement on the existing codes.
GTAC s3	Transmission Products and Zones - overall	Todd supports the use of Daily Nominated Capacity, Priority Rights, OBAs and balancing at the Receipt Zone. The change in transmission pricing will result in some winners and losers, but should not have a net increase in cost to consumers overall. There are a number of operating parameters defined that are yet to be assigned values, e.g. the Running Mismatch Tolerance. These will impact on Shippers costs and possibly relationships with customers. The planned 'Specific HDQ/DDQ' for hourly profiles appears to be unworkable. First Gas does not appear to have taken account of Nova's submission on this point.	Currently Nova nominates daily at 16 points on the Maui pipeline and nominates and monitors 64 Vector gas gates; most of which are actively managed at a minimum of monthly intervals or on an as required basis. Under the GTAC these are combined into less than 20 or so Gas Gates. These will have to be actively managed on a daily and intra-day basis in order to stay within the zero tolerances allowed in the GTAC. The combination of the MPOC and VTC bookings is complex, but in terms of nominations there are only a few gates between the two networks that require nominations and reconciliation. The primary complexity under the existing codes is optimising balancing requirements on the Maui pipeline against demand and production capacity. There is flexibility within tolerances to manage variability and

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			minimise aggregate gas and shipping costs overall. On balance the GTAC methodology is better with more consistency. Separation of delivery quantities from receipt point nominations and the definition of the Receipt Zone is particularly useful for managing imbalances.
	DNC	The DNC charge is not a throughput charge as such. By definition it includes a charge on quantities nominated but not shipped, i.e. underrun charges are inherent in the DNC system. First Gas needs to take this into account when considering its transmission charges as total expected revenues will not simply equate with total expected volumes.	DNC is a useful methodology as long as the underrun / overrun penalties are not excessive. Does this new level of intensive attention to DNC nominations lead to better outcomes? To do so it needs to be shown to free up valuable transmission capacity either; a) in the short term for congestion reasons, or a) for competition reasons; or b) to enable the “Park & Loan” service. Just as the introduction of MBB to the MPOC increased the operating costs for Shippers, Shippers can be expected to invest more resources into forecasting, monitoring and offering to accommodate this change; which will come at a cost. To some extent this cost should be offset by improved data interfaces with the OATIS

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			replacement which would be more efficient for Shippers to work with. Overall the GTAC is likely to result in a more efficient use of the available pipeline capacity to transport and store gas so long as those benefits are captured by pipeline users rather than privatised by First Gas.
	Balancing	Under the GTAC the controls over Shippers' processes are much tighter, with the need to consider volumes across more Zones and the impost of underrun/penalties for every Zone, every day. In contrast, under the VTC the overrun charges arise as the outcome from an annual capacity booking decision.	With the rebate of penalties to shippers, the incentive for accuracy is maintained as there is a prospect of loss occurring but that loss can be mitigated through nomination accuracy resulting in a rebate. This potentially represents an improvement over the status quo which provides relatively limited means of mitigating transmission capacity overruns.
	Priority Rights	Todd is still not convinced that the process designed for priority rights will have the desired impact. Nova's last submission to First Gas discussed this point. While the auction process has not yet been fully defined, we don't expect that should be of concern.	In the absence of any immediate congestion issues, Todd believes this can be more fully considered in the future, just as long as the IT system remains flexible enough to cater to future changes to the Priority Rights design. The existence of Priority Rights, even if there are issues to be addressed, is a material improvement over the existing codes.

Item	Description	Comment	Assessment
	Agreed Hourly Profile	The concept of managing hourly quantities with major gas users is acknowledged, but there has been no demonstration that this has been a particular problem under the existing codes with Huntly, Stratford or Methanex. It is important that all gas fired electricity generators are treated equally and we are aware that some generators may have legacy agreements that may not be subject to the GTAC including disclosure requirements. 'Specific HDQ/DDQ' is still an unknown ratio and its application of the Daily Delivered Quantity is nebulous.	Nova is concerned how implementation of this regime, together with the timing of intra-day cycles will impact on the operation of large industrial sites and gas fired electricity generation plant. The GTAC is only an improvement if the tighter controls provide benefits by way of the Park & Loan facility or better control over the Taranaki pipeline pressures. First Gas has given no undertaking with respect to improvements in controlling Taranaki pipeline pressures so this cannot be considered a benefit.
GTAC s4	Nominations	The industry appears to have settled on much of the status quo in terms of daily nominations cycles. Nova's submission for more cycles was not accepted on this point. Todd still believes that it will become apparent that both First Gas and Shippers will benefit from extra intraday cycles, particularly given the minimal tolerance margins. Under the new nominations process and the new allowances, information availability is critical. It must be insured that gate data is readily available to allow for daily balancing.	There is no direct equivalent to s15.2 of the MPOC under the GTAC; so the emergency cycle is likely to be used on a frequent basis. The emergency cycles are a must, but understanding the process is another thing. There is no real understanding or worked examples of how the emergency cycles will work in practice or how First Gas will exercise its discretion when an emergency cycle is requested. The GTAC will only be an improvement on existing codes when and if the number of intraday cycles is increased. That should be easily implemented under the new systems.

Item	Description	Comment	Assessment
2	**Pricing terms**		
GTAC s11	Fees and Charges	The basic DNC fee provides a straightforward charge that simplifies determining the costs to be passed on to customers. During the development of the GTAC Nova has raised concerns with respect to the high level of penalties proposed and the costs associated with very low tolerances for error. While the level of penalties has been moderated over the course of the GTACs development, there remains potential for inefficient and costly charges, at least until issues around such charges are resolved.	The process of rebating back the penalty charges is a notable improvement over the existing codes. As well as being more equitable, the most significant benefit to Shippers is the direct feedback on the net cost or otherwise on their management of nominations and balancing gas. Overall, the DNC fee structure and rebate structure on penalties is materially better than the aggregate charges under the existing codes.
3	**System operation**		
GTAC s6	Energy allocations	Under the GTAC, daily gas allocations, under D+1 or any other methodology, need to be accurate and timely if Shippers are to be able to manage their mismatches closely and use the data to project their following days' gas requirements. If a D+1 estimate errs on the high side, then the error can result in both an overestimate of the balancing gas required as well as potentially leading to a higher estimate of the DNC nomination for subsequent periods, thereby compounding the impact of the error. D+1 allocations will be required for all days, even if it is largely automated for some of the public holidays.	The D+1 allocation process will require increased investment by Shippers to refine their estimates. The provision of a single Receipt Zone will make it significantly easier to trade gas between Shippers on a daily basis.
GTAC s7	Additional Agreements		

Item	Description	Comment	Assessment
	Supplementary Agreements	Supplementary agreements will be key to meeting the specific requirements of some end-users. The greater certainty that such agreements can provide would be useful.	Supplementary Agreements are appropriate.
	Interruptible Agreements	Interruptible Agreements are not an initial problem but may become essential to maintaining or obtaining customers.	Interruptible Agreements are a useful adjunct to capacity and congestion management and are consistent with international practice.
	Interconnection Agreements (ICAs)	The absence of an agreed ICA in relation to Receipt Points represents a significant concern to Producers. Even assuming that existing operating parameters will continue to be accepted (which is not guaranteed) clause 7.13(g) could be imposed in such a way that significant costs are imposed on Producers to comply with reporting on intra-day gas production issues (noting that most production issues are either quickly resolved, or are of a nature that the Producer cannot easily define the potential scope of an outage in the early stages).	Currently interconnected parties under the MPOC and VTC have firm connection rights. Once the GTAC is approved by the GIC, interconnected parties under the MPOC have less certain rights to access relative to those connected to the ex-Vector pipelines where the GTAC will not cut across or affect their existing agreements which are likely to remain confidential. It is possible that negotiations on ICA's might be extensive. In the absence of satisfactory resolution, there are limited avenues for reaching a satisfactory resolution of differences.

Item	Description	Comment	Assessment
GTAC s8	Balancing		The principle of separating the DNC nominations from balancing volumes in the Receipt Zone represents an improvement on the existing codes.
	Park and Loan	The Park & Loan facility is expected to be a useful tool for parties to manage running mismatch positions on occasions when Shippers do not have the flexibility with Producers to correct their position in the short run.	Currently Shippers are able to manage their positions through tolerances and cash-outs. The Park & Loan formalises this and provides a benefit overall assuming the revenues flow back to Shippers. If First Gas is to retain the profits from providing the Park & Loan facility outside the regulated revenue base then Todd is of the view that: b) First Gas would have reason to manage the parameters driving Shipper behaviour in order to maximise its potential revenues from the Park & Loan facility, and c) The value extracted from Shippers (and their customers) will leave them worse off than under the existing codes.
GTAC s9	Curtailment	Emergency means an event or circumstance (or a series of events or circumstances) which First Gas determines to be an emergency, irrespective of its cause or whoever (including First Gas) may have caused or contributed to that emergency. The flexibility inherent in this definition may lead	This section benefits from having a single code and the advantages that brings in terms of managing line-pack across the whole transmission system. The separation of DNC and Receipt Point nominations also gives greater operating flexibility and

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		to dispute.	responsiveness when it comes to curtailments.
GTAC s10	Congestion Management		The GTAC provides additional mechanisms by which incidence of congestion may be reduced, as well as tools for managing congestion. As such the GTAC is materially better than the existing codes.
GTAC s12	Gas Quality		No material change
GTAC s13	Odorisation		No material change
4	**Governance**		
GTAC s14	Prudential Requirements		No material change
GTAC s15	Force Majeure	There is no equivalent clause to s15.1 and 15.2 in the MPOC providing for a rapid response to gas volumes due to an FM event. There is increased disclosure and therefore accountability for FM events by both Shipper and First Gas. There is a risk that s15.7 may conflict with confidentiality clauses between Shippers and Producers.	No material improvement
GTAC s16	Liabilities		No material change
GTAC s17	Code Changes		The GTAC change process is materially better than the mix of the two existing codes and it specifically avoids the situation where net beneficial changes can be used to introduce less favourable changes at the

Item	Description	Comment	Assessment
			same time.
GTAC s18	Dispute Resolution	Dispute resolution is enhanced by the presence of clause 1.2(cc)	