

22 December 2016

Ben Gerritsen
First Gas Limited
C/-Gas Industry Company
PO Box 10-646
WELLINGTON

By email: info@gasindustry.co.nz

Dear Ben

# 11 Chews Lane PO Box 10568 The Terrace Wellington 6143 New Zealand

Genesis Energy Limited

Fax: 04 495 6363

# Gas Transmission Access: Single Code Options Paper

Genesis Energy Limited ("Genesis Energy") welcomes the opportunity to provide a submission to First Gas Limited ("First Gas") on the consultation paper "Gas Transmission Access: Single Code Options Paper" dated November 2016 ("the Consultation Paper").

Genesis Energy appreciates First Gas's commitment to a collaborative codedesign process. We have found the approach refreshing, and would like to reiterate our willingness to provide feedback and assist at each stage of the code's development. As New Zealand's largest retailer of residential gas, we are committed to delivering value and choice to customers. As such, we believe enabling the use of gas will be the most important objective for the new code.

# Efficient Investment

We agree with the proposed code objectives. However, we believe efficient investment in gas pipelines and associated infrastructure is a significant principle, and should be included as a specific code objective. Efficient investment underpins First Gas's ability to enable the use of gas and support market growth, as First Gas's main business is investing in and operating gas transmission and distribution assets. This is where the bulk of the costs paid by gas end users to First Gas arise.

Due to the significance of this principle of efficient investment, and the potential impact on the end consumer, Genesis Energy considers it fundamental that the

objectives of the gas transmission code directly promote efficient investment by First Gas. We would like to see the inclusion of a sixth objective: "Promote efficient investment in transmission and non-transmission assets".

The proposed wording for this additional objective is deliberately broader than the objective proposed by Gas Industry Company ("GIC") in its September 2016 consultation paper<sup>1</sup>. This is to capture instances where the long-term benefit of gas users is best promoted by investment in assets other than pipelines.

# Our preference: Menu of Capacity Products

Genesis Energy supports the first high level option, Menu of Capacity Products ("Option 1") presented in the Consultation Paper. We believe Option 1 best aligns with the code objectives, and will provide the right platform for growth and innovation in the industry.

# Greater flexibility

The menu approach under Option 1 provides shippers with the greatest flexibility as it gives shippers the ability to choose the right product, or combination of products, as and when needed to manage their unique portfolios.

The menu-type approach of Option 1 is desirable because it accommodates the differing physical capacities on First Gas's transmission system. Available capacity varies across the network, as illustrated in Figure 7 of the Consultation Paper. The ex-Maui pipeline has surplus capacity, while some parts of the ex-Vector pipeline are approaching a capacity scarcity situation. Under Option 1, shippers that operate on the ex-Maui pipeline could choose not to have longer term capacity rights, as day-ahead rights would suffice due to the extremely low likelihood of a scarcity situation arising. On the other hand, shippers operating on the ex-Vector pipeline may wish to obtain longer term capacity rights to manage the risk of capacity scarcity.

Under Option 1, a continuum of capacity products could be offered across sections on the transmission system as required. Secondary trading of capacity rights may not be required, or supported by participants on all sections of the transmission system. Option 1 provides a flexible platform from the onset; products could be added or removed in response to demand.

#### Greater certainty

Option 1 provides shippers and gas end users with the opportunity to obtain longer term rights to transmission pipeline capacity. This enables them to have



<sup>&</sup>lt;sup>1 1</sup> Gas Transmission Access – Single Code Options Paper – Part 1 ('SCOP1').

greater certainty that they will have sufficient pipeline capacity available to meet their expected future demand, or their customers' expected future demand. In addition to supporting risk management, greater certainty of capacity availability would also help facilitate downstream competition.

# A level playing field

Designing the priority right product as an option (i.e. the capacity right would be subject to a nomination being made) would help avoid capacity sterilisation. The use of an auction mechanism to allocate scarce capacity would facilitate a level-playing field for new entrants and incumbents.

#### Price signalling

Option 1 provides longer-term capacity price signals to gas end users, which aids their consumption and investment decision making. These price signals are also beneficial to First Gas for transmission system planning purposes.

#### Simplicity

Option 1 offers simplicity for shippers who are comfortable booking capacity on a day-ahead basis. This might be expected to occur on those parts of the First Gas transmission system where there is plenty of pipeline capacity (eg, the ex-Maui pipeline).

Limitations of Option 2: Daily Nominated Capacity ("Option 2")

#### The cost of simplicity

We believe the primary benefit of Option 2 is its relative simplicity in situations where there is plenty of capacity on the First Gas transmission system. We see Option 2 as being appropriate for the ex-Maui pipeline, where this is the case. However, Option 2 may not be suitable on parts of the ex-Vector pipeline, where capacity scarcity issues either exist, or may exist, in the foreseeable future.

Option 2 will lead to greater uncertainty for shippers and gas end users as it will limit their ability to manage risk exposure. Further, we believe the benefit of simplicity that Option 2 offers in instances of excess capacity is available under Option 1, given Option 2 is effectively a subset of Option 1. Therefore, we support Option 1 over Option 2, as Option 1 offers a better balance between the benefits of simplicity and flexibility.



## Lack of longer-term price signals

Although we appreciate First Gas would develop more dynamic pricing under Option 2 to signal scarce capacity, we see a key benefit of Option 1 over Option 2 is its ability to provide longer term capacity price signals. This would aid gas end users' consumption decisions and First Gas's transmission system planning decisions.

In this way Option 1 better enables the use of gas and better promotes efficient investment decisions than Option 2.

### We do not support Option 3: Flow to Demand Service ("Option 3")

Genesis Energy does not support Option 3. While it may appear to be appealing for shippers to 'shift risk' and pass some operational complexity to First Gas, we believe the overall complexity of this option would be greater than for the other options. Under this option we would expect a material increase in First Gas's costs to operate its transmission system in accordance with the code.

Not only are gas and electricity quite different commodities, New Zealand's gas and electricity market structures are also quite different. We believe that Option 3 would end up resulting in relatively heavy-handed regulation to avoid the risk of undesirable market behaviours.

Option 3 would be open to abuse, particularly if robust primary balancing arrangements were not in place. Compared with Options 1 and 2, Option 3 places a more significant burden on First Gas to ensure the transmission system is being operated within the appropriate standards.

Overall, we are concerned that Option 3 would add significant complexity and cost to the gas market for little or no additional benefit.

#### Enhancements to Option 1

# The use of auctions

Under Option 1 we believe an auction mechanism would enable the most efficient allocation of scarce capacity, thereby furthering, in particular, the first, second and fourth proposed objectives. It would mean capacity was purchased by those parties who valued it most highly. A capacity auction would also provide First Gas with price signals for transmission system planning and investment purposes. In this way, an auction-based approach would further the additional objective we propose above.



Although a capacity auction mechanism may not be needed initially, we consider it important that the mechanism is designed upfront and in sufficient detail to be implemented if and when it is needed. It is easier to design an optimal capacity allocation mechanism in advance of when it is needed as 'winners' and 'losers' are less entrenched in their positions.

Adopting this approach helps balance simplicity and flexibility. The capacity allocation arrangements would be used only when required, and only on those parts of First Gas' transmission system that have capacity scarcity. This approach reduces complexity and transaction costs thereby facilitating a competitive gas market.

#### Investigation of entry/exit pricing across zones

Genesis Energy favours exploring the pros and cons of using entry/exit pricing across transmission system zones. We have identified several potential benefits. These include simplifying capacity reservation and pricing, and facilitation of secondary trading of gas capacity rights and the gas commodity (by reducing the transaction costs of trading). We think it is important that transmission access arrangements facilitate depth and liquidity in the wholesale gas market. An entry/exit pricing approach would appear to further, in particular, the first, second, third and fourth objectives. However, we believe that careful analysis of these potential benefits, along with the costs of entry/exit pricing, needs to be undertaken.

## Strengthening code governance arrangements

Genesis Energy supports the establishment of a robust governance framework for the new access code. This will give stakeholders confidence in any future decisions made under the access code. However, we do not believe the proposed code change process will give participants sufficient confidence that differing views will be fairly represented.

Genesis Energy considers it extremely important that GIC has a central role in code development and code changes to ensure the interests of the broader gas market, in particular consumers, are represented in the code change process. We encourage First Gas to consider ways in which GIC could be involved to add greater value to the decision making process; whether it be undertaking an initial analysis of a change and proposing an alternative for voting if required, facilitating independent evaluation (i.e. through a panel of expert advisors), or providing for GIC to have a more significant role in the final stage of the approval process. We believe this would also deliver on First Gas's desire for code amendment



decisions to be driven by an independent assessment of the value of the proposed change in meeting gas industry policy objectives.

We welcome further discussion with First Gas on any of the points raised in our submission. Please feel free to contact me on 04 830 0015 to arrange a suitable time.

Yours sincerely

Victoria Parker Regulatory Advisor



# Appendix A: Responses to Consultation Questions

# **OUESTION**

Q1:Do you agree with the objectives proposed in this paper? Are there any other objectives or outcomes that we should be aiming for that are missing?

#### COMMENT

Yes. As discussed in our cover letter - we believe efficient investment should be included as an objective.

There is a significant amount of proposed capital expenditure in gas transmission and non-transmission assets, and the new code will be a key mechanism for First Gas to have a view of future investment requirements. Due to this, we recommend adding the following objective:

"Promote efficient investment in transmission and non-transmission assets".

We also suggest the final proposed objective be "Promote transparency" instead of "Increase transparency". This would better reflect that this is an ongoing objective, rather than an objective applying only when the code is created.

The first and second proposed objectives currently refer to the costs and risks of transporting gas. We suggest the first proposed objective limit itself to discussing the pricing of transmission services, and the reference to the costs and risks of transporting gas (paragraph 2.7.3) be covered under the second proposed objective.

Lastly, we suggest the objectives should make reference to the adoption of sound governance practices in relation to the code. This reference could be included under the first proposed objective (Enable the Use of Gas).

We see enabling the use of gas as the most important objective. The remaining objectives all contribute to this first objective.  The addition of an objective relating to the promotion of efficient investment in transmission and non-transmission assets would make the proposed objectives compatible with the regulatory objective in SCOP1.
the promotion of efficient investment in transmission and non-transmission assets would make the proposed objectives compatible with the regulatory
de
Yes, we agree that the five other legal or subsidiary instruments presented in the consultation paper are all relevant to establishing the boundaries of the new code.
We consider the code should contain more specific guidance for setting the prices of transmission services than just high-level principles as proposed in the consultation paper.  The code should also contain some guidance for determining and managing line pack.  The pricing of transmission services and the management of line pack have
important implications for users of First Gas's transmission assets.
Not at a high level. However, detailed elements to the scope of the code will need to be considered during the detailed design phase.



QUESTION	COMMENT		
Overview of options for the access regime			
Q7:Are there other code options that you believe should be considered in the process of developing a new code in addition to those described above?	No, but entry/exit pricing should be considered under Option 1.		
Q8:Are there particular lessons from international experience that you consider First Gas should seek to learn from when designing and implementing the new access code?	European experience, in particular, points to capacity hoarding/sterilisation having adverse effects on the efficient trading of capacity and the gas commodity, as well as on retail competition.		
	Overseas experience, as well as New Zealand experience, shows that distance-based transmission pricing along contractual paths increases the transaction costs associated with capacity and gas commodity trading, as well as retail competition.		
Q9: How much focus do you think should be placed on ensuring that transmission access arrangements facilitate further development of the wholesale gas market? Are there particular features of a new access code (in addition to short term availability of capacity) that are important?	We think it is important that transmission access arrangements facilitate depth and liquidity in the wholesale gas market.  Arrangements for making capacity available (in particular short-term capacity availability) and transmission pricing arrangements are two areas of the code that are important to facilitating the wholesale gas market.		
Option 1: Menu of capacity products			
Q10: Do you have a view on whether the priority right product should be designed as an option (subject to nominations) or a fixed property right?	The priority right product should be designed as an option (i.e. be subject to nominations). We do not support a fixed property right, as this can lead to capacity sterilisation.		



#### **QUESTION**

this product?

# Q11: Do you consider that there would be sufficient interest in priority rights

to justify the effort in administering

#### COMMENT

Yes, in parts of First Gas's transmission system with relatively limited capacity.

At a minimum, the code should have in place the arrangements to enable parties to purchase priority capacity rights, even parties mav not use arrangements at the outset. This would avoid the possibility of industry needing to address this issue at a later date, particularly when 'winners' and 'losers' would be more entrenched in their positions, making it harder for an optimal solution to be reached.

We consider that an auction mechanism would enable the most efficient allocation of scarce capacity. It would mean capacity could be purchased by those parties who valued it most highly.

Q12: Do you have any views on the broad features of the priority right product, such as the length on the contract, the frequency of booking rounds. etc?

Yes – we believe First Gas should look to determine an appropriate limit on the percentage of pipeline capacity that could be sold as a right (eg, 70%), in situations of capacity scarcity or potential for scarcity. Of course, in situations where there is plenty of capacity, as is currently the case on the ex-Maui pipeline, this threshold would never apply. Shippers would simply book capacity on a dayahead basis.

Where capacity rights are sold, we favour a maximum duration of one year for a capacity right, but with the ability to purchase one year rights several years in advance. In addition, there may be merit in offering a monthly or quarterly capacity product.



# **QUESTION**

# Q13: Do you have any views on the frequency and timing of nomination cycles, and the role of nominations?

#### COMMENT

We consider that gas flow nominations are likely to provide better information to First Gas than capacity nominations. Shippers face financial incentives to not under/over-nominate their gas flow requirements. In comparison, shippers only face a financial incentive to not under-nominate their capacity requirements.

We therefore think that First Gas should be interested in receiving gas flow nominations in addition to capacity nominations.

We see a reason for decoupling gas capacity nominations and gas flow nominations if First Gas is considering putting in place capacity overrun charges on the ex-Maui pipeline. Decoupling would recognise the differing financial incentives on parties under each type of nomination.

However, further work on the regime's design is needed before we can provide a firm view on this matter.

We are comfortable with nominations first being submitted a week prior to gas day, and then updated on the day prior to gas day. However, we believe that hourly updates to nominations on a gas day should be permitted.

Q14: Do you have any preferences on the allocation methodology at receipt points and delivery points (OBAs, rules based approaches, or a combination of different approaches)? Our preferred allocation methodology at all receipt points, and at delivery points on the ex-Maui pipeline, is that used under the Maui Pipeline Operating Code (MPOC); allocated quantities are based on nominations and any quantities traded under a gas transfer agreement. Our preferred allocation methodology at delivery points on the ex-Vector pipeline is the downstream allocation process



QUESTION	COMMENT			
Q15: Are there any aspects of the menu of capacity products option that you see as particularly valuable, or particularly concerning?	We see the certainty that this option provides to a shipper as being valuable. Signalling the price of longer term capacity is also of value, both for the transmission system planning and investment purposes and for end-users' consumption decisions.			
Option 2: Daily nominated capacity				
Q16: Do you have any views on how scarcity should be signalled if a daily nominated capacity option was developed?	We consider that capacity would be allocated most efficiently during times of scarcity through the use of an auction mechanism.  Administered scarcity prices are a second-best option because they do not enable parties to reveal their willingness to pay as precisely. However, we would consider this alternative if the auction mechanism was shown to have a negative net-benefit.			
Q17: Are there any elements of the daily nominated capacity option that you consider should differ from capacity nominated as part of a menu of capacity products (option 1), such as the frequency and timing of nomination cycles, and the role of nominations?	No.			



$\sim$ 1	IFOT	101
<i>(</i> )(	11-0-1	17 11
$\mathcal{O}$	JEST	IUIN

Q18: Are there any aspects of the daily nominated capacity option that you see as particularly valuable, or particularly concerning?

#### **COMMENT**

Our main concerns with this option are:

- It does not provide longer term certainty to a shipper, and
- It does not signal the price of longer term capacity.

If this option were to be pursued, we believe it is important to have the capacity allocation mechanism designed in sufficient detail to be implemented if and when it is needed.

We do not think it is sufficient to have the mechanism agreed in principle only. 'Winners' and 'losers' would be more entrenched in their positions at the time when the mechanism's design needed to be finalised, making it more difficult for this to occur.



# Option 3: Flow to demand service

Q19: What information do you think it would be realistic for shippers to provide as forecasts for managing the transmission system under a flow to demand service option?

We think it would be realistic for shippers to provide annual, quarterly, and day-ahead forecasts of their demand for transmission capacity. However, we query how robust these forecasts would prove to be if there were no, or limited, financial incentives on shippers to be accurate.

We agree that shippers should also be required to notify First Gas of the connection of any new end consumers on the transmission system, for which the shipper would have responsibility for shipping gas.

We also agree First Gas should explore the merits of:

- 1) Obtaining load information from distribution network owners,
- 2) Requiring distribution network owners to ensure that load connected to their network does not exceed the maximum design flow rate for the relevant delivery point without first obtaining First Gas's approval (not unreasonably withheld).



Q20: What information would you require from First Gas to provide you with confidence in security of supply both in the short and long term under this approach?

We would like to see First Gas publish the following information at a minimum:

- 1) A winter capacity margin, with full disclosure of underlying assumptions and other inputs into the calculation.
- 2) Annual security of supply assessments looking out 10 years, again with full disclosure of underlying assumptions and other inputs. These assessments would look at both energy and capacity.
- 3) First Gas' operational arrangements and, if necessary, investment programme to support security of supply in both the short term and the long term.

Q21: How dynamic do you think pricing should be under a flow to demand service approach?

We consider that the pricing of capacity under a flow to demand service approach would need to be as dynamic as under the alternative approaches. This is to place an incentive on a shipper to operate in the same manner as under the alternative approaches, rather than seeking to shift various risks and costs onto First Gas, in the hope these would be allocated to other parties.



Q22: Are there any aspects of the flow to demand service option that you see as particularly valuable, or particularly concerning?

While it may look intuitively appealing to a shipper to have First Gas take away some of the complexity and effort for shippers under the first two options, we are concerned that the overall cost of the gas market would increase. This is because moving certain risks and costs from shippers to First Gas is not expected to be efficient. Risks and costs should reside with those parties best able to manage them. We consider that a price-based approach to rationing capacity would lead to a more efficient outcome than First Gas curtailing demand through ancillary service-type contracts.

Moving various risks and costs from shippers to First Gas is likely to lead to perverse incentives. As we refer to in our answer to Question 21, shippers are best able to manage their own risk. If this resided with First Gas, risks and costs are more likely to be unfairly distributed across shippers who have no direct control or ability to manage such risk.

We think it is insightful that no other jurisdiction in the world, of which we are aware, uses this approach across its gas transmission system(s).

#### Link between access options and system characteristics

Q23: Do you believe that the new code access arrangements should reflect the physical constraints on the transmission system? If so, which option does this support in your view?

Yes, it is important that the new code access arrangements provide signals efficient operation of, and investment in, the gas transmission system.

We consider that Option 1 best achieves this.



Q24: Do you have any views on how capacity on the system should be defined and priced (i.e. between points or between zones or between points and zones), and why?

We consider that capacity on the system should be defined on a zonal basis. We think that the pros and cons of using entry/exit pricing should be explored under Option 1 (entry pricing only in the Taranaki zone). The more readily identifiable benefits of this approach include simplifying capacity reservation and pricing, and facilitating the trading of gas capacity rights and the gas commodity.

Q25: Of the options described in this paper, which do you prefer and why?

We prefer Option 1; we believe this option best supports GIC's regulatory objectives, as well as First Gas's objectives. In addition to this, we believe Option 1 could be developed to provide future flexibility, reducing the likelihood of a significant overhaul should market conditions change in the future.

## Code governance

Q26: Do you have any preference on the legal form for the new code, and who should be counterparties to the new code?

We support First Gas's preference of:

- Transmission 1) service agreements that incorporate the provisions of the new code, with
- 2) Interconnection agreements that are separate bilateral contracts, with terms that may differ from other interconnection agreements where appropriate.

We believe that First Gas and shippers should be counterparties under the new code.



Q27: Are there particular code change processes or features that you consider important or valuable for the new code?

We consider it important that GIC plays a role in all code changes. This helps ensure the interests of the broader gas market, in particular consumers, are represented in the code change process. GIC could, for example, have final approval on any code changes, as under the current MPOC.

We wish to understand what First Gas intends by "an independent review", and how this would add value over and above a review by GIC. We believe the level of resource intensity in code changes will be driven by the nature of the code change. More controversial, technical, or significant code changes will, by their nature, end up requiring a more resource intensive process. A concern we have with the tiered approach suggested in the Consultation Paper is that the effort and cost associated with establishing a tiered approach (i.e. agreeing which code provisions should have a higher threshold for change) will outweigh the benefits.

Lastly, we consider that First Gas's interests should be accorded the same priority under the new code as shippers' interests. The Consultation Paper implies that First Gas's interests should always be protected (paragraph 5.9). We seek clarification from First Gas that its intention is for the code change process to not unreasonably diminish or erode parties' interests. There may be instances where the interests of First Gas and/or shippers are adversely affected in order to further the objectives of the code (eg, a change that furthers the interests of gas consumers).



## Balancing, linepack management and allocation

Q28: Do you agree with the comments on balancing and linepack management above? If not, why not?

We agree the new code will enable balancing arrangements to be simplified, including that a shipper's primary balancing obligation would apply to the transmission system as a whole.

We wish to see balancing arrangements in the code that are as harmonious as possible with the capacity arrangements (i.e. conflicting incentives under each set of arrangements are minimised).

Q29: Are there any particular arrangements for balancing and linepack management that are not discussed in this paper that you consider critical to include in the new code?

We note the criticality of accurate and timely information helping shippers undertake primary balancing.

We consider the code should clearly guide First Gas in how it undertakes balancing actions, to ensure First Gas uses the most efficient option (eg, purchasing customised balancing services from parties only when standardised balancing products on an exchange are unlikely to be effective).

### Non-standard Agreements

Q30: Do you agree with the comments on non-standard agreements above? If not, why not?

We agree a discounted price should be available to transmission customers who face a lower standalone cost than their allocated transmission charge. This is consistent with the objective of enabling the use of gas.

However, we query whether the criteria proposed in the Consultation Paper adequately captures all existing supplementary agreements under the Vector Transmission Code.



Q31: Are there any particular arrangements for non-standard agreements that are not discussed in this paper that you consider critical to include in the new code?	See our answer to Question 30.
Gas quality	
Q32: Do you agree with the comments on gas quality above? If not, why not?	Yes.
Q33: Are there any particular arrangements for gas quality that are not discussed in this paper that you consider critical to include in the new code?	No.
Next steps	
Q34: Do you have any comments or concerns on the process for developing the detail of the new code throughout 2017?	We note the proposed timeline is ambitious and will require a material amount of input from industry stakeholders. We urge First Gas to carefully consider the interaction of various work-streams in the planning process. Input to regulatory processes such as this code development need to be balanced with ongoing business and commercial requirements to operate in the gas market and deliver to our end customers. We also suggest strengthening the proposed governance arrangements to minimise any disadvantage on smaller industry stakeholders who are unable to commit sufficient resource to the process.
Q35: Are there particular issues or aspects of the new code that you would particularly like to be more closely involved in, including by participating in workstreams to prepare code exposure drafts and working papers?	We are interested in all aspects of the new code, and as such, we would like to participate in each of the proposed workstreams.

