



23 June 2017

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Genesis Energy Limited

Dear Ian

Gas Transmission Access Code Development: Emerging Views on Detailed Design

Genesis Energy Limited (“Genesis Energy”) welcomes the opportunity to provide a submission to the Gas Industry Company (“GIC”) on the paper *Gas Transmission Access Code Development – Emerging Views on Detailed Design of Access Products, Pricing, Balancing and Allocation* dated May 2017.

We support the collaborative process that has been undertaken to date in developing the new gas transmission access code (“GTAC”) and remain committed to working with GIC and First Gas going forward. We believe this is a once in a generation opportunity to design a GTAC that will deliver the best outcomes for our customers, our business, and the sector as a whole.

Genesis Energy in general supports the direction the GTAC is heading and understands the theoretical thinking that underlies First Gas’ proposals in the paper: we agree there is a need for both firm and non-firm capacity rights; charges that incentivise accurate nominations; and a balancing arrangement that poses primary balancing obligations on shippers.

However, when we asked ourselves what we consider to be the key question in the design process – that is, ‘does the solution match the problem?’ – we raised some concerns about whether the ‘problems’ (i.e. the design objectives) will be ‘solved’ by some of the proposals as drafted.

These concerns, as well as potential solutions, are outlined in our response below, which is divided into seven sections covering access products; pricing; balancing; allocation; IT systems; and next steps. We also note those proposals that have our in principle support at this stage, subject to further detail being provided.

Access Products

The paper states the design objectives in respect of access products include enabling the use of gas, promoting competition, increasing transparency and promoting efficient investment.

Genesis Energy is not convinced the proposed access products will suitably meet these objectives, as currently drafted, and recommends the wider stakeholder group is provided more time to engage on the design of access products.

Daily nominated capacity

As we understand it, the current proposal as to daily nominated capacity (“DNC”) will see shippers make daily nominations for the right to have gas capacity to be delivered at every gas gate (i.e. delivery point) it needs capacity for, and overrun charges calculated at each of those gates.

While Genesis Energy supports daily capacity nominations and the use of overrun charges to incentivise accuracy, we have a two-part concern with these being calculated at individual gas gates in every instance.

First, it would be exceedingly difficult for shippers to accurately nominate to every gas gate, every day; and secondly, the penalties for inaccuracy - i.e. overrun charges at every gas gate - could be disproportionate to the true costs of service.

Genesis Energy notes that while under the current Vector (“VTC”) and Maui (“MPOC”) codes we nominate to gas gate level, this is done by estimating what will be needed weekly, and daily reviews focus on adjusting nominations at a pipeline level. To make daily corrections at a gate level would be extremely resource intensive and drive costs into our business, and ultimately onto our customers. We suggest this would be similar for other shippers.

We also note an ‘every gas gate, every day’ rule will see shippers face greater overrun charges compared with the current arrangements. Given the varying gas flows across a large number of gates on any given day, this is of great concern as we do not consider this proposal to represent a fair allocation of costs, or to be ‘right-sized’ to match the solution with the problem.

To calculate an overrun charge at every gas gate - irrespective of the size of that gate or degree of congestion within the zone (i.e. a particular group of gas gates it fits within) - is ‘overkill’ from our perspective. It could see shippers, who are accurate at a zone level, penalised for minor inaccuracies, which, combined as a cost per customer metric, could be a major burden. Parties could be incentivised to increase their nominations in order to avoid the asymmetric cost of overruns, which would be a perverse outcome.

Further, applying such a blunt instrument will not be reflective of the true costs of supplying transmission services. In other words, we do not accept that First Gas needs to have this degree of granularity to fulfil its role of supplying transmission services, and while we understand the appeal of a one-size fits all approach from an ease of operation point of view, it takes away from the flexibility that pipeline users should reasonably be able to expect relative to First Gas' requirements.

If the sole argument is that First Gas needs this level of granularity to facilitate the development of priority rights ("PR"), then we are unconvinced the suggested benefits of PR will outweigh the costs they may invite, particularly as those benefits are yet to be fully appreciated.

Priority rights

As we understand it, PR are designed to provide a tool for firming the capacity of DNC, that is, in the event of congestion, shippers that have DNC with PR exercised will be allocated capacity ahead of those with only DNC.

Genesis Energy supports the creation of firm capacity rights, and in theory sees value in the PR product. However, we are unable to understand fully in practise how these might work: conversations to-date have led us to believe they will only be valuable in limited circumstances e.g. business as usual days where there is congestion, but not in a critical contingency event.

This has left us confused, as it seems likely, in almost all of the examples we have imagined, the high congestion levels may trigger a critical contingency, at which point the Critical Contingency Regulations apply, overriding PR and making PR ineffectual. At that point, the only benefit to having PR would be less accountability for overrun charges.

We also consider that as PR will only be sold up to a percentage of the gas gate, it will be impossible for all demand to be supplied firm. This may lead to an overvaluation of PR rights: it is not clear if over time the cost of DNC charges in a constrained area will increase due to the constraint or the value of PRs will increase to compensate.

Without further information, it is hard to justify the investment required to design these products and roll them out across the whole of the transmission system, particularly in light of the lack of congestion currently experienced under both the VTC and MPOC codes, and considering the arguments we have already made around DNC and overrun charges.

We appreciate that more congestion is a possibility in the future and that forward planning for this is important. However, we do not consider PR to be the only tool to provide forward signals of congestion. There is a degree of responsibility that must lie with the transmission service provider and interconnected parties to plan for growth that is being observed on particular areas of a pipeline, or new large users that may come online from time-to-time.

Alternative solution(s) for access products

Genesis Energy does not want to completely rewrite the proposals and therefore suggests there is a workable alternative for DNC and PR that will be to the benefit of the wider stakeholder group.

This would see a hybrid model whereby delivery zones applied for DNC in areas with no congestion, and gas gate DNC applied in areas with congestion. The zone and gate configuration would be dynamic: specific triggers would be codified that provided for adjusting the size or composition of zones should congestion arise or drop away. This would flow through to PR, where PR would only be offered at gates where congestion had been identified.

We consider such design should not be outside the scope of a transaction management system if it is truly as configurable as has been suggested, and would better match the solution to the problem i.e. it will be 'right-sized' to provide First Gas with what it needs to manage physical flows on the transmission pipeline, while not imposing unnecessary cost burdens on shippers.

As a secondary alternative, we would recommend that a gigajoule ("GJ") threshold applied at all gas gates, whereby if an overrun was under a GJ certain limit –we would suggest 10 GJ - no charge would apply. This would go some way to addressing our concerns with DNC overrun charges and focus shippers' efforts on nominating to meaningful gas gates. In addition we are of the view that overrun charges should only be passed through if the gas gate in total becomes out of tolerance similar to how pipelines are currently balanced. Overruns would then be prorated between shippers at either a gas gate level or zone level.

We would also like to offer suggestions specific to PR design, should these proceed as proposed currently.

Genesis Energy would like to see further consideration of a clearing price being used at auction, rather than the pay as bid proposed; PR available for one year or longer, as opposed to six months; transparency as to the percentage of a gate that has PR assigned to it; and transparency around historic congestion in areas of the system.

Each of these measures would increase the transparency around constraints in any given area of the system, which would be of great benefit to all stakeholders in our view.

Genesis Energy would also like to see consideration of a demand management system available for time of use sites. We believe that with the right financial signals, demand can be reduced, thereby reducing congestion. An access product of this kind would provide First Gas with another means to manage capacity on the network, and offer flexibility to shippers' customers who are ready and willing to reduce demand when called on.

Pricing

The paper states the design objectives in respect of pricing include recovering regulated revenue consistently, avoiding price shocks and setting efficient prices. Genesis Energy is not convinced the proposed pricing structures specific to overrun charges will suitably meet these objectives, as currently drafted.

Overrun charges

Genesis Energy has already detailed its concerns with daily overrun charges being calculated at every gas gate under the current proposal and has suggested alternative solutions for consideration.

Genesis Energy also has concerns with the calculation of the hourly overrun charge at dedicated delivery points, including Huntly, and the impact this has on our ability to operate the Huntly Power Station flexibly.

For example, we have found that on 10 per cent of days over the last two years the peaking limit would have been exceeded at Huntly. This limits gas volumes in the peaks and encourages Huntly to generate with more coal and less gas; contrary to the objective to enable the use of gas, and leading to ripple-effect consequences such as increased carbon emissions.

We regard the possibility of developing non-standard agreements for unique load profiles, like Huntly, as worthwhile exploring under the new GTAC and are pleased to have had constructive conversations about how non-standard agreements could account for 'peaky loads' such as those observed by gas-fired peaking power plants.

The value of a non-standard agreement in managing such plants could be captured by Genesis Energy and other plant owners, both current and future, and the increased interaction and information flow inherent in such contracts would also be to the benefit of First Gas in managing the transmission system – a potential 'win-win'.

A further point in respect of Huntly Power Station is that Genesis Energy considers there to be a misalignment between the throughput allowed at the Huntly gas gate and the maximum hourly quantity that can be delivered. Following the retirement of large users such as the Southdown and Otahuhu power stations we believe the throughput needs to be reassessed to reflect the new operating and commercial reality of this area of the system.

First Gas and GIC will be unsurprised to read this in our submission as it is a conversation that has been ongoing under the current MPOC arrangements, with Genesis Energy providing evidence of the perceived misalignment. However, it would

be remiss to exclude this important point from discussions about future GTAC arrangements.

Other charges

For Genesis Energy to comment in more detail on the DNC charges, throughput charges or PR charges proposed, we require further details from First Gas – i.e. the actual numbers that will sit against these pricing structures. Without these details, it is difficult to lend our full support.

We would need more information to feel comfortable with what is being proposed and to understand how this pricing compares with the status quo e.g. what will the “postage stamp” pricing for DNC look like following determination of different pricing zones?

We need to understand the cost/benefit ratio of the GTAC compared with the status quo in order to determine whether the GTAC is in the best interests of our customers, our business and the gas sector as a whole.

Balancing

The paper states that design objectives in respect of balancing include maintaining line pack, achieving cost-effective outcomes, incentivising primary balancing and allocating the costs of secondary balancing to causers. Genesis Energy agrees that the proposed balancing arrangements will meet these objectives.

We support balancing mismatches being assessed across the system as a whole for shippers and at respective connection points for Operational Balancing Agreement (“OBA”) holders. We agree that the tolerances should be as proposed i.e. plus/minus the percentage of nominations each day for OBA holders and plus/minus the percentage of deliveries at non-OBA points and nominations to OBA delivery points for shippers. We are also open to exploring different balancing tolerances for normal operating days compared with days the system is under stress.

Genesis Energy supports the development of a ‘Park and Loan’ service to account for temporary shortfalls or surpluses of gas for interconnected parties and shippers. We suggest day-ahead (at a minimum) notice is required to First Gas.

Our support for the balancing arrangements proposed, and the design of a ‘Park and Loan’ service, reflects our preference for flexibility in the management of day-to-day gas volumes and the value that this offers our business and its customers.

Allocation

The paper states that the allocation design objective is to allocate gas flows to identified parties in a timely, accurate and consistent fashion. Genesis Energy agrees

that the proposed allocation arrangements could meet this, subject to further consideration of First Gas' proposed replacement of the D+1 pilot.

Genesis Energy supports existing code arrangements at receipt points remaining available, and agrees an OBA should be an option at receipt and dedicated delivery points.

We look forward to learning more about First Gas' new IT systems with an inbuilt algorithm based on DNC nominations.

We may lend support to such a model should it deliver the reduced cost, increased reliability and improved timeliness benefits as promised. We request First Gas benchmarks the costs of its proposal against the upfront and ongoing investment cost that would be required to move D+1 from its pilot phase.

IT systems

Genesis Energy is also looking forward to learning about the other capabilities of the IT systems First Gas recommends for the new GTAC.

We would support a system that offered increased flexibility, to the extent that nominations can be updated more frequently than intra-day. We believe that the current system of four intra-day nominations is outdated and inflexible. By contrast the New Zealand electricity system is updated 48 times per day. Similar to the electricity system, which is moving to an hour-ahead gate closure, we would like to see software that accounted for hourly updates.

One concern we would like to flag in respect of the IT systems relates to the risk cited as 'Readiness of code provisions'.

We consider that the timeframe – August 2017 - for issuing a statement of requirements and a request for purchase to vendors does not account for further feedback that will, without doubt, be received during the full code review phase, also scheduled for August 2017. The full code review is the first opportunity stakeholders will have to consider the proposal as a whole; the significance of this cannot be underestimated.

Genesis Energy requests First Gas reflects on the timing implications of engaging IT vendors too soon, and allows sufficient time for stakeholders' feedback on the whole code to be considered.

Next steps

Genesis Energy considers the importance of getting all stakeholders to 'come to the table' for further conversations about the GTAC design and urges First Gas and GIC to continue their efforts to bring everyone along through the next steps in the process,

including finalising the detailed design, code transition and governance frameworks, and IT procurement.

Ongoing engagement that facilitates understanding of the potential opportunities the new GTAC offers, and ways to mitigate the challenges it may present, will be crucial to the eventual signing of a robust code framework that meets its design objectives and will endure through years to come.

If you would like to discuss any of these matters further, please contact me on 09 951 9272 or at margie.mccrone@genesisenergy.co.nz.

Yours sincerely



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