

#### **MEMORANDUM**

TO: GTAC Stakeholders

FROM: First Gas

DATE: 21 August 2018

RE: Block 1 Outputs – 3 Curtailments and OFOs

This memo describes proposed changes to GTAC provisions on Curtailments and Operational Flow Orders (OFOs) to address the findings of the Final Assessment Paper (FAP). This follows discussion at a workshop on Wednesday, 8 August 2018 that is documented in the Draft Minutes issued by the GIC on 17 August.

Please note that we need stakeholder input on the cycle timing for the Extra ID Cycle as follows:

• Should the notification period for Shippers for the Extra ID Cycle in section 4.19 be 30 minutes or 1 hour?

We ask for feedback on this point via the GIC website by 3 September 2018.

The memo also sets out how First Gas intends to implement curtailments in certain situations on the pipeline. These will form the basis of the Curtailment Standard Operating Procedure (SOP).

The proposed changes to the GTAC are provided in appendix 1 of this memo. This is open for consultation until 3 September 2018. If stakeholders wish to comment on these proposed changes, this can be done during the Workshop Block occurring September 4 to 6 (which will enable discussion of the topics with First Gas) or comments can be submitted to First Gas through the GIC website prior to 3 September.

#### Final Assessment Paper (FAP) findings

The findings of the FAP on Curtailments and OFOs were summarised in the GTAC work programme as follows:

- Deemed non RPO if fail to comply with OFO (21) (alongside Liabilities Workstream)
- Adverse timing implications of replacing MPOC section 15.2 with option for shippers to request an extra intra-day cycle under GTAC 4.18 (22).

Please note that we have chosen to take the first point on Deeming of non-RPO in the Liabilities Workstream.



# Points raised during discussion

Item	Addressed by
7. August	
2.3.10 First Gas to consider extending the ability to call extra intra-day cycles to all interconnected parties (not just those with an OBA).	We think this is appropriate (as well as having 7 ID cycles). Changes made to GTAC sections 4.18 to 4.20. This is in addition to the increase in the number of ID cycles in section 4.11 from 4 to 11.
	Please see below comments on autonomination functionality to manage this requirement.
2.3.11 First Gas to provide an example of RP curtailments under the GTAC (as part of SOPs) and the consequences of not complying with a curtailment direction.	See discussion below.
8 August	
2.2.1 First Gas to consider requiring receipt points nominations from shippers/interconnected parties that do not want to have OBAs.	Interconnected Parties at Receipt Points are to approve, curtail or reject NQs (see the changes to GTAC section 4.). This has also been reflected in RP CET section 5.4. Note also a similar requirement for DP Interconnected Parties in DP CET section 5.7.
2.2.2 First Gas to confirm whether the new IT system will have functionality for producers to auto-accept/auto-reject nominations by contract and nominations cycle.	We confirm that auto-nomination functionality has been included in the current design of the IT system and will ensure that this functionality can differentiate between cycles and contracts.
2.2.4 First Gas to consider reducing the timeframes for responding to extra intraday cycles to 30 minutes (to open) and 30 minutes (to respond). First Gas to confirm whether that fits with its IT system capability.	First Gas is able to expedite timings and will be able to allow for this design in the IT system. However, there was no consensus from stakeholders on whether this was desirable as Shippers expressed a view that this would not allow them time to meet nomination times imposed on them in Gas Sales Agreements. We therefore seek input from stakeholders on this point to resolve the matter.
2.2.5 First Gas to consider extending the ability to call extra intra-day cycle to all interconnected parties (not just those with an OBA).	See the response to point 2.3.10 above.



Item		Addressed by
2.2.6	First Gas to consider the link between flow to nominations and receipt point nominations made by shippers.	Changes to the definition of OFO have been made to broaden the scope should a party be flowing outside their nominations with an adverse effect on other users of the system. This will allow Shippers to have consideration to trades in considering their position on the network.
2.2.7 First Gas to look at options for communicating OFOs (in its curtailment SOPs).		The definition of OFO allows these to be issued to a Shipper or an interconnected party as does sections 9.5 and 9.7. Details on how the OFO will be delivered will be provided in a Curtailment SOP (similar in scope to that provided for the MPOC). The Tieto IT system will be configured to send out messaging with an interface for text messaging.
Augus	st 9	
2.3.1	First Gas to reconsider the amount of notice for the "Extra ID Cycle". In particular, whether 30 minutes or one hour was an appropriate notice period having regard to the interests of producers (who want a shorter notice period) and shippers (who want a longer notice period). First Gas will seek feedback and present a proposal at a subsequent workshop. First Gas was asked to consider whether the notice period should be in a SOP (i.e. outside the GTAC) to enable the amount of notice to be easily adjusted.	See response to 2.2.4 above.
2.3.2	First Gas to revisit the definition of "congestion". In particular, whether an unusual event, such as a momentary constraint could be captured within the existing definition.	We have reviewed the definition of Congestion and do not believe that there is a conflict between these provisions for curtailment and congestion.
4.1.3	An additional point was raised for First Gas check whether there is a mechanism to undertake regional curtailments (i.e. whether First Gas could scale back a particular profile or profiles pro rata). This related to	Curtailment provisions have been amended to ensure that First Gas can issue OFOs to receipt points and delivery point (ss. 9.5 and 9.7) and adjust nominations subsequent to the OFO (ss. 9.8 and 9.9). The definition of



Item	Addressed by
the situation in section 10.3(b) of the 7 December 2017 GTAC where congestion is in effect due to the current offtake of gas.	the OFO has been amended to allow for regional curtailments.  This clarifies that First Gas can target any response to particular segments of the transmission system in order to achieve the desired operation outcomes with minimal impact on system users.

## How First Gas intends to manage curtailments

The GTAC applies a different paradigm to either the VTC or MPOC as the receipt and delivery nominations are not linked. The GTAC approach provides greater flexibility to system users (who are no longer expected to artificially tie their offtakes to particular injections) and provides added operational flexibility to First Gas (by focusing interventions on one end of the system if required). However, this paradigm also means that First Gas can no longer mechanically curtail delivery nominations to address issues in the receipt zone. However, the incentives on each party to have a balanced position are strong as parties will pay ERM charges for any excess imbalances at the end of each day. These incentives, along with underrun and overrun charges to delivery zones, are expected to encourage system users to maintain a balanced position on a day and ensure that their receipts and deliveries do not cause operational issues that affect other parties.

In addition, First Gas can (and will) take balancing actions should there be a need to manage line pack in accordance with section 8.5. The curtailments discussed in this section are therefore will only be required once other options have been exhausted.

When can First Gas curtail?

First Gas may curtail in the following situations:

- An Emergency is occurring or is imminent
- A Force Majeure Event has occurred or is continuing
- A breach of any Security Standard Criteria and/or a Critical Continency would otherwise occur
- An interconnected Party's interconnection agreement expires or is terminated or is not executed
- A Shippers TSA, Supplementary Agreement, Existing Supplementary Agreement, GTA or Allocation Agreement expires or is terminated
- It is performing, or is to perform, scheduled or unscheduled Maintenance
- It does so to maintain the Target Taranaki Pressure pursuant to section 9.1

If there is Congestion at a point (either station or section of pipeline), then this is covered by separate provisions in section 10. Curtailments therefore relate to significant events on the pipeline where First Gas needs to step in.

What kind of situations are these?

We envisage the following cases that we would need to deal with:



- 1. Issue at an individual receipt point
- 2. Issue at an individual delivery point
- 3. Regional high pressure in the receipt zone due to over-injection by producers
- 4. Shortage of gas in a delivery location due to overtaking by users
- 5. Regional high pressure in the receipt zone due to undertaking by users
- 6. Shortage of gas in a delivery location due to under-injection by producers

These cases require slightly different treatment and we will go through each case in the following sections.

### Issue at an individual Receipt Point

We assume this situation would occur due to non-specification gas, equipment failure, other emergency or a safety issue. In this case we would curtail flow at the receipt point. If there is an issue of specification or emergency we would do so without further consideration to protect lives and other users of the pipeline.

## Issue at an individual Delivery Point

We assume that this situation would occur due to non-specification gas, equipment failure, other emergency or a safety issue. In this case we would curtail flow at the delivery point. If there is an issue of specification or emergency we would do so without further consideration to protect lives and other users of the pipeline.

## Regional high pressure in the receipt zone due to over-injection by producers

This situation would occur where the Upper Line Pack Limit and/or Target Taranaki Pressure was breached and all flows in the delivery zones were as per their nominations. It would also be where we had no information that a user was looking to take gas stored in the pipeline (e.g. an AHP).

The first possibility in this instance is that there was a particular party who was over-injecting in relation to their nomination. If this is an OBA party, then the receipt point in question would be curtailed. If this was not an OBA party, we would look at Shippers using that receipt point and curtail their receipt flows pro-rata to fix the problem. We would anticipate that the Shipper would respond in the next ID cycle to direct the curtailment to the right receipt point.

If there was no obvious party causing the high pressure situation, then we would curtail all parties pro-rata in the Receipt Zone to fix the problem.

## Regional shortage of gas in a delivery location due to overtaking by users

This situation would occur where the Lower Line Pack Limit was breached (with the potential for a Critical Contingency at a point on the pipeline) and all flows in the receipt zone were as per their scheduled quantity. It would also be where we had no information that a user was looking to reduce their offtake to increase gas stored in the pipeline (e.g. an AHP).

The first possibility in this instance is that there was a particular party who is overtaking in relation to their nomination. This delivery point would be curtailed by OFO to either a Shipper or an OBA Party.

If there was no obvious party causing the shortage of gas, then we would curtail all parties pro-rata to fix the problem.



### Regional high pressure in the receipt zone due to undertaking by users

In this case the part(ies) causing the high pressure in the receipt zone are user(s) not taking their gas in the delivery zone/s. Again, this would be a situation where the Upper Linepack Limit or Target Taranaki Pressure was being reached and we had no information to say that the situation would clear itself. If we were able to identify who was undertaking we would look to target that party with an OFO requesting that they reduce their receipt nominations to reduce injections in the upstream. If the interconnection point was owned by an OBA party, we would direct the OFO to the shippers serving that point. Shippers receiving the OFO would directly adjust their receipt nominations to address over-injection in the upstream. This would have to be a physical reduction in flow and not a correction in position that could be achieved through trading.

The ability to require parties in the delivery zone to address upstream nominations is a new functionality that has been added to the definition of OFO.

Shortage of gas in a delivery location due to underinjection by producers

In this case the part(ies) causing the shortage of gas in the delivery zone are producers not injecting enough gas. This would be a situation where the Lower Line Pack Limit was breached in a region (with the potential for a Critical Contingency) and we had no information to say that the situation would clear itself. If we were able to identify who was underinjecting we would look to target that party with an OFO requesting that they reduce their delivery nominations to reduce take in the delivery zones. If the interconnection point was owned by an OBA party, we would direct the OFO to the shipper serving that point. Shippers receiving the OFO would directly adjust their delivery nominations to address underinjection in the upstream. This would have to be a physical reduction in flow and not a correction in position that could be achieved through trading.

The ability to require parties in the delivery zone to address upstream nominations is a new functionality that has been added to the definition of OFO.

We believe that the above cases outline most of the cases that would present themselves and cover the same scope as the MPOC Curtailment SOP, which can be found here: <a href="https://www.oatis.co.nz/Ngc.Oatis.UI.Web.Internet/Common/Publications.aspx">https://www.oatis.co.nz/Ngc.Oatis.UI.Web.Internet/Common/Publications.aspx</a>.