

MEMORANDUM

TO: GTAC Stakeholders
FROM: First Gas
DATE: 31 July 2018
RE: Block 2 Support Materials – 4 Overrun/Underrun Incentive Charging

This memo summarises expected transmission underruns and overruns under the GTAC following changes made in response to the GIC Final Assessment Paper (PAP). This memo investigates the symmetry and levels of incentive charges and the settings that will ensure an appropriate level of revenue under the GTAC. This material will be discussed at the workshop on Incentive Fees on 9 August 2018.

Final Assessment Paper (FAP) Findings

The findings of the FAP on balancing tolerances were as follows:

- Incentive charges (daily overruns/underruns) not symmetrical (12)
- Level of incentive charges too high (12)
- May encourage inefficient pipeline usage decisions or excessive efforts for nominations accuracy (54)
- Higher fees should not apply at congested delivery points when congestion is not evident (13, 55)
- High incentive charge reduces competition as it is not cost reflective (13, 60)
- Disproportionately high in non-congested situations (60)
- Hourly overrun fees and rebates

We have reviewed the incentive charging and, as stated in our submission on the Preliminary Assessment Paper, we agree that the GTAC as drafted does not provide for a symmetrical incentive regime.

We also agree that incentive charges need to be set to strike the right balance between the accuracy of nominations and the administrative effort involved in getting nominations right and want to ensure that the settings in the GTAC achieve that objective.

What is the right level of incentive fees?

We are concerned that incentive fees set the right balance to ensure efficient behaviour. Our aim in setting the level of fees is to ensure that accurate information is provided to the transmission system to allow efficient operations. As we've stated in our submission on the Preliminary Assessment Paper (PAP), we view the right level of incentives as having three dimensions:

- **Balance.** Do the charges encourage the right behaviour and avoid creating value from systematically over- or under- nominating?
- **Fairness.** Are any shippers unfairly targeted by the way that incentives are set or the level of incentive charges given their customer mix?
- **Efficiency.** Is the overall revenue from the incentive at an appropriate level that balances the value of the incentive with the administrative cost of minimising charges?

Addressing the symmetry of incentive fees

First Gas is concerned that the incentives for underrun and overrun are symmetrical. In our submission on the FAP we noted that we did not think we had achieved this in the settings in the GTAC as submitted on 8 December 2017. These settings are:

Overrun – $F = 2 \times \text{DNC}$

Underrun – $F - 1 = 1 \times \text{DNC}$

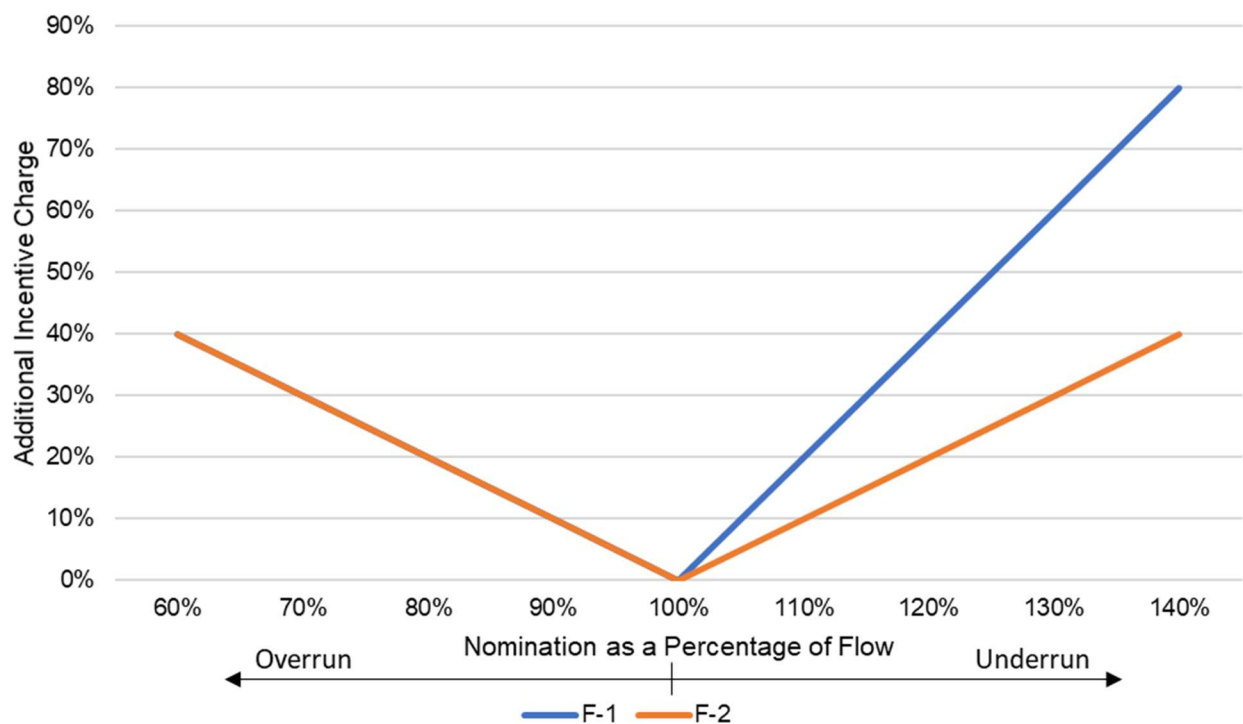
When combined with the cost of daily capacity, the incentives are not balanced. We believe that this can be corrected by having a 2x difference between overrun and underrun fees. The tables and graph below demonstrate this symmetry.

Current DNC incentives (Underrun = F-1)

Gas Flow	Nomination (DNC = 1)	Overrun Fee (DNC x 2 = 2)	Underrun Fee (DNC x 1 = 1)	Total Fee	\$/GJ
10	6	8	-	14	1.40
	7	6	-	13	1.30
	8	4	-	12	1.20
	9	2	-	11	1.10
	10	-	-	10	1.00
	11	-	1	12	1.20
	12	-	2	14	1.40
	13	-	3	16	1.60
	14	-	4	18	1.80

Recalibrated DNC incentives (Underrun = F-2)

Gas Flow	Nomination (DNC = 1)	Overrun Fee (DNC x 2 = 2)	Underrun Fee (DNC x 0 = 0)	Total Fee	\$/GJ
10	6	8	-	14	1.40
	7	6	-	13	1.30
	8	4	-	12	1.20
	9	2	-	11	1.10
	10	-	-	10	1.00
	11	-	-	11	1.10
	12	-	-	12	1.20
	13	-	-	13	1.30
	14	-	-	14	1.40

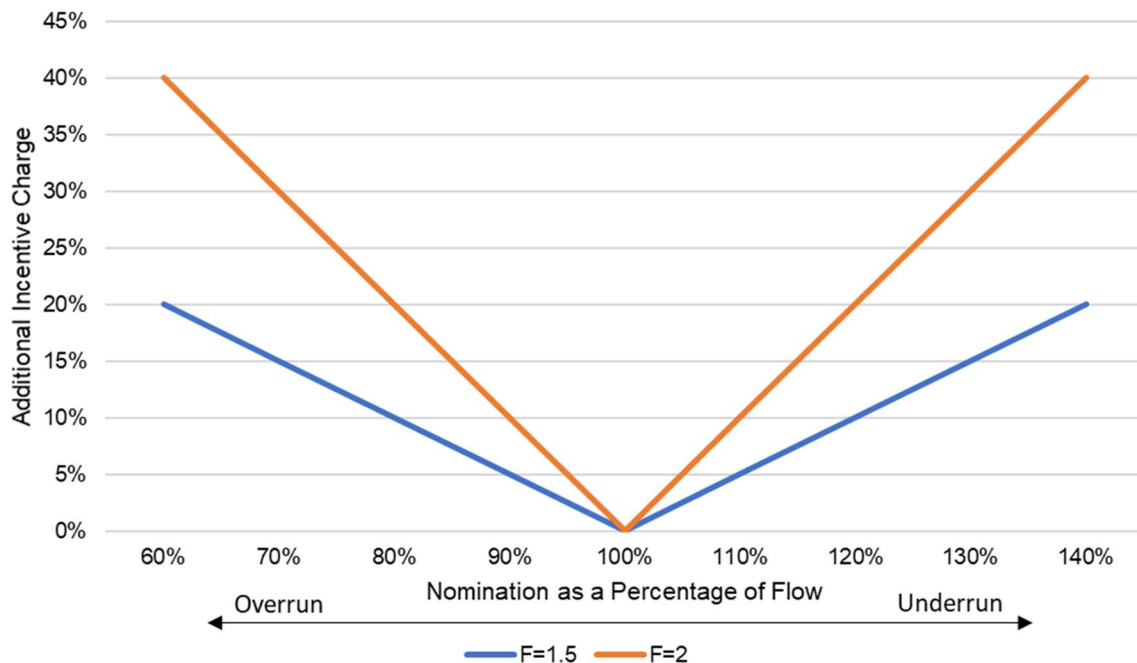


We believe that this change addresses the first part of the issues relating to incentive fee symmetry.

Getting the right scale of incentives

From the analysis provided by the GIC, the scale of the incentive fee was considered to be high as a proportion of transmission revenue. This was based on VTC incentive fees being in the order of 5% of revenue annually. Previous modelling by the GIC indicated that the GTAC settings yielded fees in the order of 9% of revenue. While believe it will be difficult to accurately forecast incentive fee revenue prior to operation of the GTAC, we accept that 9% is high. We also note that First Gas has some scope to increase fees should the incentives not prove strong enough to encourage accurate nominations. We are therefore happy to start out at a lower setting.

We have therefore undertaken analysis and believe that setting $F = 1.5$ will change the scale of incentive fee revenue. The difference in incentive strength is demonstrated in the chart below.



In terms of total revenue, we have examined the revenue forecast presented in our memo *'Block 2 Support Materials – 5 Transmission Pricing'*. The results of this analysis show an aggregate level of incentive fees of around 4% as shown in the table below based on 2018/19 forecasts of revenue.

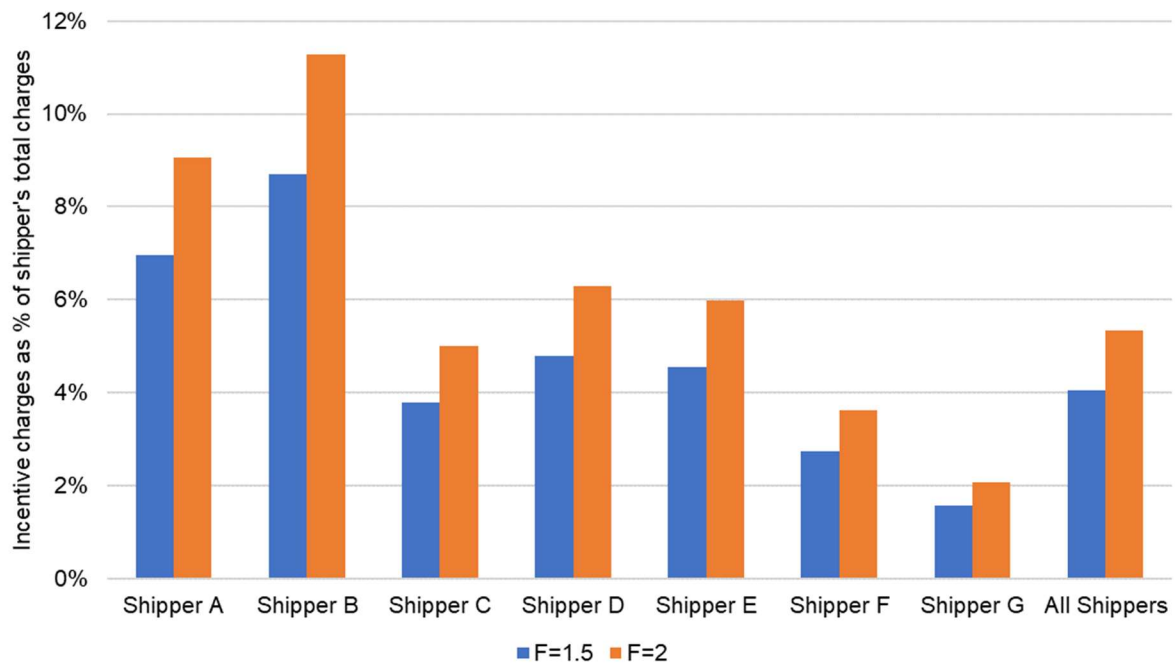
	DNC Revenue	Underrun Revenue	Overrun Revenue	Other Revenue	Total Revenue
Delivery Zones	\$76,329,218	-\$1,887,983	\$6,513,542		\$80,954,777
Delivery Points	\$19,988,862	-\$99,945	\$299,833		\$20,188,750
SAs				\$25,865,192	\$25,865,192
ICAs				\$882,676	\$882,676
<i>Total</i>	<i>\$96,318,080</i>	<i>-\$1,987,928</i>	<i>\$6,813,376</i>	<i>\$26,747,868</i>	<i>\$127,891,396</i>

Incentive Fees as a percentage of total transmission revenue 4%

We therefore believe this change addresses the concerns raised in the FAP regarding the scale of incentive fees.

Fairness of the incentive charges

The final test is whether there is fairness in the distribution of the incentive charges across the shippers. In the initial work presented in our submission on the PAP, we found that some shippers were less accurate than others in their nominations. However, these shippers often did not directly nominate and therefore the proportion of the fees allocated to those shippers was not accurate. We have re-examined the potential distribution of fees using on the same analysis of VTC flows as a proxy for nominations that used in the analysis presented in our PAP submission. The results are shown in the chart below. While there is still some distribution in the incentive fees across shippers, the extreme of the range is attenuated, with the least accurate shippers paying just over 8%. This analysis was undertaken without consideration of the effect of mass market auto-nominations. The effect of this scheme would be to further reduce incentive fees paid as a percentage of transmission revenue.



Conclusions

Based on the changes to the incentive fee settings above, we believe that the findings of the FAP have been largely addressed:

- Changing the underrun fee to F-2 addresses the symmetry of the fees
- Reducing F to 1.5 reduces the overall scale of the fee revenue and dampens the distribution of fee revenue among shippers

Coupled with the mass market nomination scheme we believe that the proposed settings deliver a fairer result. We look forward to discussing this issue with stakeholders at the workshop on 9 August.